DOCUMENT RESUME

ED 037 920

EF 002 889

TITLE	The Measure of a Good School. A Guide to Evaluation of School Systems Adapted Particularly for Use in Kentucky School Districts.
INSTITUTION	Kentucky Univ., Lexington. Coll. of Education.
PUB DATE	Apr 64
NOTE	78p.
AVAILABLE FROM	Bureau of School Service, College of Education, University of Kentucky, Lexington, Kentucky 40506 ($.50)
EDRS PRICE	EDRS Price MF-$0.50 HC Not Available from EDRS.
DESCRIPTORS	Administrator Evaluation, *Evaluation Criteria, *Evaluation Techniques, *Facility Inventory, Guides, *Personnel Evaluation, *Program Evaluation, Student Transportation

ABSTRACT

Comments on school evaluation are divided into the following categories--(1) program goals and objectives of the schools, (2) staff--age, sex, experience, preparation, and problem of retaining good teachers, (3) administration and their application to district organization, (4) finance--an outline of how a foundation program operates, and comments on general tax structure, (5) school plants--site and location, pupil dispersal and enrollment projection, and (6) school transportation--reviewing routings and organizations of services toward economy and improved service. Forms for grouping data are presented along with some comments and suggestions for using them to simplify data-gathering procedures. (FS)

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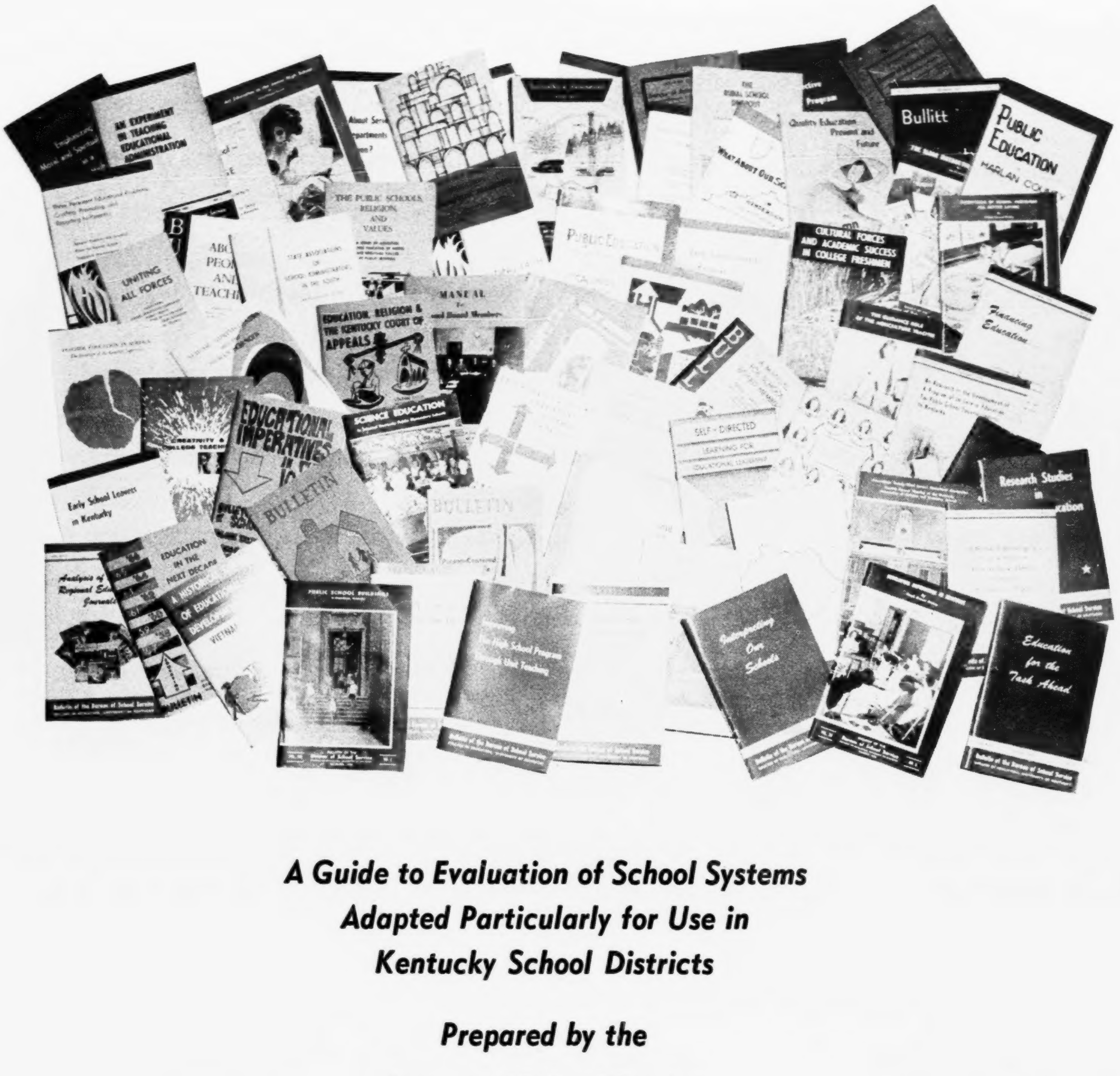
THE MEASURE OF A GOOD SCHOOL

April 1964



A Guide to Evaluation of School Systems Adapted Particularly for Use in Kentucky School Districts

Prepared by the

Bureau of School Service
College of Education
University of Kentucky
Lexington

EF 002 889

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Planning—A New Urgency

Accelerated change has put a premium on planning.

"Hindsight is better than foresight" is a rule which applies only to the advantage of the person who likes to say "I told you so." "Foresight would have been better had we used it" is a more valid commentary on reality.

No one can, of course, out-guess all of the future. Yet there is a growing realization today that, considering the speed with which we travel, it is well to look ahead--and, the faster we travel, the farther we need to see ahead.

The speed of change in the last two decades has overwhelmed many school systems. Many a school building on a cramped site now surrounded by heavy traffic sat in open country only twenty years ago--and no one thought to protect it from noise and hazard then. Many buildings were designed without regard to possible need for expansion.

Examples in physical things are graphic, but the same principle is true of more intangibles. For instance, a good school staff is "built" or "grown";--it does not come over-night; it cannot be bought with any amount of money tomorrow. It requires planning: a program of careful recruitment of competent teachers; an in-service program that will help them develop professionally, both as persons and as a working team; the facilities and working conditions that support their efforts and generate confidence that their task is important; a salary schedule designed to reward merit and encourage dedication and self-improvement. These, over years, produce a quality school staff. But they do not occur when teachers are employed simply at convenience and left in isolated take-it-or-leave-it assignments; nor, when districts are simply concerned to see that every position on the roster is filled for next year. These things happen only as the district takes responsibility for an over-all planning that weighs obligations in perspective, anticipates points of strain, and involves the community in the planning so that it becomes sensitive to needs and supports the planning.

There is clear evidence that, barring major world catastrophe, America will double in population by 2,000 A.D.--just 37 years from now! Except for those things which will be outmoded (and the outmoded will surely be replaced with something else by 37 years from now) we shall need twice as many automobiles, filling stations, highways, airports, airplanes, recreation facilities, restaurants, churches, homes--and school rooms! We can plan;--or America can become one big overcrowded slum!

This is the choice which prompts us to urge that leadership everywhere take responsibility for looking ahead. Of course, there are things ahead that no one can see; of course, hindsight will still be better than foresight--for the critic. Of course, what we plant is against the hazards of flood, drought, and insect plague; so it has ever been. But the necessities of planning are more desperate than ever before--and for nothing more than for education!

BUREAU OF SCHOOL SERVICE
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The Measure of a Good School

A Guide to Evaluation of School Systems
Adapted Particularly for Use in
Kentucky School Districts

The Bureau of School Service is an arm of the College of Education, University of Kentucky, which is to make available to citizens of the Commonwealth whatever resources there are at the University of Kentucky for improvement of their schools. The work of the Bureau is largely, in such respect, consultant and survey service to school districts.

Such work takes the form of studies of various sizes and purposes, ranging from short-term counseling through a consultant team set up to advise on a given problem to longer studies in connection with building programs, financial planning, or even comprehensive surveys of entire systems. The Bureau has been involved in studies in fifteen different school districts in the last five years.

Such services are provided largely as part of the University's general responsibility to the Commonwealth, charges to school districts made only to cover travel, report publication, any special consultant expenses above the regular operation of the Bureau, and minor overhead. (No consultation fees are charged for services of regular members of the Bureau staff; but when others of the University staff are to be "borrowed" for special purposes, charges to pay them are included in the agreement for the study.)

Those interested in obtaining the services of the Bureau may address:

Bureau of School Service
University of Kentucky
Lexington, Kentucky

Any School Problems?

As long as the world is changing, school districts are sure to have problems. Some of them are the day-to-day problems of adjusting facilities to variations in enrollment, or filling of teaching positions vacated by death or retirement--and such "routine" matters. Others are broader in scope, involving major decisions of long-range capital investment for school plants, or overhaul of curriculum, or merger between districts. Many of the problems, big and little, involve money--or the lack of it. Problems are as inevitable for schools as death and taxes for citizens.

The acid test of school administration comes in the way it deals with its problems. If the American schools were rooted in static tradition, the answers to problems would be traditions themselves. But in a land where the school is responsible to and is a responsibility of the community it serves, there are few sure, "right" answers to school problems. The demands to prepare youth for new ways of life, the needs indigenous to the community, the support of citizens, the obligations to meet the standards set by the state--and the prospects for changes in all these and many other things--must all be weighed. Decision-making becomes a continous flow of complicated and diverse considerations for most administrators and school boards. It challenges their utmost capacity to see things "steadily and whole," to view complexities with insight and perspective--and, particularly to evaluate the results of the decisions they have made.

Many find it helpful to review occasionally, to "take stock," or make a comprehensive study of "where they have been," "where they are going," and "what lies ahead." It is to help in such "stock takings" that this leaflet has been prepared.

Everyone--citizens generally, parents, board members, administrator, teachers, custodian and maintenance personnel, and students--all have a stake in the school and are therefore concerned with school problems. Their responsibilities with respect to those problems, however, vary greatly. Certainly the board should not be left with the direct decision as to what grade is best for teaching long division. Neither should teachers have the responsibility for a decision to mortgage the district revenue for a new building. Yet, all are concerned.

In an ideal democracy, people participate in a decision to the extent that they have a responsibility concerning the decision, will be affected by it, or have special competence with regard to it. This ideal, of course, can only be approached, never perfectly realized. It has practical application, however, in that it suggests: (1) that school problems should involve people, rather than one person, in their solution; (2) that different groups may properly participate in decision-making for different kinds of school problems; and (3) that people who have especially studied particular problems (who may be detached from the immediate one and therefore may view it more impersonally) may be desirable participants. The last of these, of course, represents the role the Bureau of School Service attempts to fill in working in school districts.

Can the Bureau help?

The work of the Bureau in a school-district study depends upon the particular problems at issue, and what people are to be involved in the study should depend upon the purposes in mind. Some important considerations are these:

1) The Bureau has no power in a school district--except for the influence of whatever findings it may make or advice it may give; therefore,

2) In problems involving public decisions (for tax increase, or merger, or major change of policy) the work of the Bureau may be expected to have more value as it involves citizens--by working with a citizens' advisory council, for instance, and publishing its studies of the district.

3) In studies involving "internal" problems already recognized by the board, the administration, or staff, a study may properly be for "settling domestic difficulties without a public airing." The Bureau may best serve in such cases as a consultant team to advise only those concerned, with no necessity for a published report, except one perhaps for special circulation.

4) The Bureau, in agreeing upon terms of a study, makes a contract to deliver its services within the limits of the agreement. This is to say, if its commitment is to study and advise on a limited problem to a limited audience (board, administration, or special group of teachers, for instance) its reports are made to those groups only. On the other hand, many of the Bureau's studies are properly meant for public consumption from the start and are prepared accordingly by agreement. This is another way of saying that the Bureau is in the business of helping school people attack their problems at whatever level they may be--not of going into a district to overhaul generally its operation or use public pressure to do so--though it does assume that schools have a responsibility for candor and openness to the communities they serve, an obligation the boards and staff are trusted to assume.

5) Most problems have ramifications. It is difficult to consider curriculum, for example, without considering preparation levels of teachers, or test scores of students, or class load, or needs of students as reflected in the character of the community. A study of school plants generally leads into such matters as bonding power--and the total school budget becomes incidentally involved. The Bureau attempts, however, to treat with such "incidentals" only to the extent necessary to place the problem under study in a context of possible solution. Often, of course, two or more problems "conspire" to bring a case to a head--i. e., a building shortage precipitates concern over the total problem of finance and future planning.

Problems studied by the Bureau range through such as:

How do the curriculum offerings compare to those of other schools generally?

How do the students compare in test performance to those of other schools generally?

What are present and anticipated building needs of the district?

What enrollments can be anticipated? Where should facilities be located?

Is the district allocating available funds where they can be most productive?

How should students be grouped for economy and efficiency of instruction?

How can the pupil transportation system be made more efficient?

What policies should be developed as a framework for more efficient administrative operation of the system?

How can an in-service education program for staff be developed to up-grade the school program?

Cost of studies?

Studies by the Bureau during the past five years have ranged from as low as $180 for service of a consultation team on a limited problem to $5,500 for a comprehensive survey of a district within the state. Since travel expense is a major item, distance from the University is an important consideration.

One purpose in the preparation of this booklet is to simplify data-gathering procedures so that such costs, in travel and staff time, will be reduced. It is hoped, therefore, that the forms provided here may further reduce charges. These forms are for use in studies either by districts which wish to conduct their own studies or by those who would use the Bureau in all or part of a study. They are meant to make it easier for either local or Bureau staff to get information into meaningful patterns. Anyone is welcomed to use them or reproduce them.

The Bureau does have some resources not readily available in some school districts. It has access to the University computer, as well as smaller machines, for such intricate calculations as those for making projection of enrollments, long-range per-pupil costs, and school income. It has scoring facilities for standardized tests and for interpreting their results for comparative purposes. Also, the Bureau can provide labor and equipment for preparing population dispersal maps, graphs, and charts. Particularly, of course, the Bureau can call upon people of specialized background to help on special phases of studies.

Why this publication?

This booklet is to promote the purposes of the work of the Bureau of School Service--but not necessarily the work of the Bureau. That is, it is meant to encourage and provide some "gadgets" useful for self-appraisal and planning in school districts. If the Bureau can help in studies, well and good; on the other hand, it is only as school districts, both school staffs and citizens, come to understand their own problems and plan for their solution that the purposes of the Bureau and this little publication will be served. As previously indicated, material here may be reproduced, adapted, or used for any value it may have.

Using this booklet

Following are outlines--with forms for grouping data, with some comment and suggestions for their use--of various categories into which school problems commonly fall. Actually, it is impossible to set neat boundaries around problems--so the arrangement here is one largely of convenience.

It is suggested that those using this manual proceed by:

1) Defining the problem to be studied.

2) Checking the sections of this manual related to the problem. (The Table of Contents listings can be checked. Usually a problem will "center" in one section but also involve matters treated in other sections.)

3) Checking the particular forms or outlines which seem appropriate for grouping the data useful to the study. (Forms are listed as sub-sections in the Table of Contents.)

4) Assigning the checked forms (making copies where necessary or passing this manual about) to persons who will be responsible for gathering the data and making required calculations and summaries.

5) Drawing the various reports together, by formal or informal meetings of participants, into a composite report to be delivered in whatever way is desired.

COMPARISON WITH NEIGHBORS
Harlan County Schools Have Problems
NEEDS of the PARIS SCHOOLS
WORLD POLITICS TODAY
CALDWELL COUNTY
EDUCATION

Section I—School Program

THE SCHOOL OUR COMMUNITY BUILT
(Compliments of Mother Goose, "The House That Jack Built")

A PROLOGUE

This is the school that our community built.

These are the beliefs our community has about what we should do in the school that our community built.

These are the objectives that support the beliefs our community has about what we should do in the school that our community built.

These are the subjects we teach that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

These are the things that we do in our classes to teach the subjects that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

These are the results of the things that we do in our classes to teach the subjects that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

These are the citizens who are the results of the things that we do in our classes to teach the subjects that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

This is the community of citizens who are the results of the things that we do in our classes to teach the subjects that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

This is the school built by the community of citizens who are the results of the things we do in our classes to teach the subjects that serve the objectives that support the beliefs our community has about what we should do in the school that our community built.

Kentucky State Board of Education standards call for each school district to have drafted a statement of its educational beliefs and objectives "which reflect: (1) the needs of all children and youth; (2) the needs of a free society; and (3) the value of the humane tradition."* Furthermore, though no exact procedure is prescribed, this statement is to be developed cooperatively, with involvement of both school staff and community personnel. This statement, whatever its form, should be the beginning point for evaluating the school program. After all, the test of any program is in the degree to which it does whatever it is supposed to do.

Consider:

1) Does the statement show a balanced concern for the needs of all children and youth of the community? Does it, for instance, tend to overemphasize attention to the college bound in comparison to those ready for a vocation immediately upon graduation--or vice versa? Does it emphasize certain needs disproportionately--for instance, intellectual needs by comparison to emotional, physical, vocational, or citizenship-preparation needs? If so, is the emphasis justifiable?

2) Does the statement have as a basis some study of the community--so that it reflects concern for particular requirements life in this community may make of students?

3) Does the statement recognize that this community is in a larger community context--of

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* "Accrediting Standards and Courses of Study for Kentucky Elementary and Secondary Schools," Educational Bulletin, Vol. XXVII, August, 1959, No. 8, Department of Education, Frankfort Kentucky.

the state, the nation, and the whole world--and that students face life beyond the immediate school district?

4) Is the statement consistent? That is: Do any of the assertions contradict each other? Do the objectives set up in the statement support and give meaning to the beliefs they are supposed to support and make effective; or, are they contradictory or irrelevant to the beliefs?

5) Is the statement clear and definite enough to be a useful guide in planning the program of the schools? Are the stated objectives, for example, specific enough that they would help one decide what courses should be taught and what content and activities should be included in the courses.

6) Is the statement available to all personnel who might be expected to use it as a guide in planning the school program and carrying it out? Furthermore, is there a conscious effort made to accomplish what the beliefs and objectives imply in the operation of the school program?

7) Assuming that the statement represents a collection of goals or ideals which should give direction to (rather than specify) the work of the school staff--does it indicate any priority order of objectives so that "first things" may be placed "first"? Is the approach, in attempting to make the statement effective, one of expediency--or of persistent, continuous planning? For instance, is there a tendency simply to do those things which the district has the personnel and physical resources to do conveniently now--and to forget the rest? Or, is an effort made to use resources for top-priority objectives and to set up plans for doing the rest in order of priority as resources are sought and become available.

Course Offerings

A thorough-going evaluation of the academic program of a school calls for gathering of information in patterns which vary from district to district and are too voluminous to fit into any forms which could be provided here. Therefore, offered here is a working outline only for steps to be taken in gathering the data and dealing with it. This outline can be used in a broad sense to bring together a comprehensive picture of the program of the whole district, or it can be applied to various grade levels or to single schools.

The purposes for gathering the data are represented in the question preceding their respective steps.

Do the course offerings serve the objectives set up in the statement of educational beliefs and objectives for the district?

Step 1: List all the courses taught grade by grade.

Step 2: For each course, list the objectives each course respectively is meant, and can reasonably be expected, to serve.

Step 3: Compare the list of objectives so obtained to a list of those set forth in the statement of beliefs and objectives for the district.

Consider:

Are all the objectives set forth in the statement "covered" in the list of objectives for all the courses?* Or are there "gaps"?

Are there some listed for the courses that do not appear in the statement? If so, are they justifiable objectives which should have been included in the statement?

Do some objectives appear to be over-emphasized by their repetition--at the expense of others? Does the order of emphasis appear to match the order of importance of objectives?

Do the activities (or content**) of the courses serve the objectives respectively assigned the courses (or subjects) taught?

Step 1: List the activities (or content) respectively for each course or subject taught.***

Step 2: Relate these to the respective objectives listed for each course or subject. (The purpose here is to answer the question: Is each course or subject doing the job it is supposed to do?)

---

* Obviously the elementary program may not necessarily be expected to serve all the objectives. Vocational preparation, for instance, is certain to get more emphasis in the high school. Also some objectives are served through extracurricular activities.

** The distinction between activities and content is not important here. Concern is with what goes on in the classroom, whether it be viewed as learning activities or subject matter.

*** If there is no "course of study" or syllabus of courses, it will be necessary to ask each teacher to outline what she does in each course or subject.

Consider:

Are all the objectives listed for each course "covered" by the various activities listed for the respective course? Or, are there "gaps"?

Are there activities which appear irrelevant to the objectives of the course?

Do some activities appear to be over-emphasized, at the expense of others perhaps? Does the order of emphasis appear to match the order of importance of objectives?

Comment: Obviously, what is on paper may not adequately represent what goes on in the classroom. Certainly, also, we should not expect nor want all teachers to teach alike--for we value the diversity which permits youngsters to be exposed to variety of viewpoints, teaching personalities, and methods. This checking of what is done in the classroom against what is supposed to be done in the classroom does have some value, we think, for the administration--providing a way for it to see whether or not it has fulfilled its responsibility to make provisions for the kind of program to which the district is committed. Subsequent to such a check, it is "up to the teacher" to see that what is "on paper" takes place in the classroom.

Consequently, involvement of teachers seems most important in this phase! Only as teachers examine their own work and apply their own best judgments as to whether or not what they do in their classrooms honestly represents what they are supposed to do can the procedure here have ultimate value. Furthermore, it is crucial that what teachers are supposed to do in their classes be something to which they are honestly committed as persons; otherwise, teachers become hypocrites in their work, either "fooling" the administration and public by teaching what they think they should or giving the students what they do not believe themselves. We suggest that teachers be heavily involved, therefore, in the development of the beliefs, objectives, and outlines of courses, though others who have a concern should participate also.

Grading, Promotion, Retention

All schools report the work of students. The manner of reporting varies from simple "report cards" which objectify teachers' judgments (in exact scores representing pupil performance) to more elaborate statements which represents quality judgments teachers make of the pupil's work through written or interview communication. Some systems use combinations of these; that is, both objective scoring and quality judgments. Often the quality judgments concern other than academic aspects of pupil development. Most schools "grade" students. The most common pattern for grading them is a five-point scale, calibrated by letters or numbers, with the bottom category for "failure" or "retention," or denial of credit for a course. Whatever the reporting system, it is generally meant to:

1) Uphold a level of expected performance so that a student may not get "beyond his depth" by advancing into difficult work too quickly.

2) Give the student a basis for self-evaluation and for his guidance toward wise academic and vocational choices.

3) Provide a basis for reporting to parents and the public so that the school may be held accountable for teaching.

4) Provide a permanent record useful for evaluation of the student when he seeks employment or college entrance later on.

What purposes does the grading and promotion system of the district serve and how effectively does it serve them?

List the following information about the grading system: (If different systems are used at different levels or in different schools, each should be examined separately.)

Is a rating scale used in reporting grades?
○ Yes ○ No If so:
The scale is a ________-point scale indicated by ______________with________as the highest grade, ________as the lowest.

Is a quality judgment in terms of the teacher's own opinion of the pupil's work a part of the reporting system?
○ Yes ○ No If so:
Does it: ○ replace letter or number grades, or ○ supplement them? Does the reporting system include anything that describes to parents the class work (beyond the simple listing of subjects) which is the basis upon which the student

is graded?
○ Yes ○ No If so, what?

____

____

How often are reports to parents issued?________

____

What is the procedure for recording grades and delivering them? Describe briefly:____________

____

____

How many times is each grade recorded (including the grade-book record)?________________

Does the system emphasize the "confidential" or "surprise package" delivery of grades to students, or does it encourage a face-to-face directness between teachers and students about what their grades are going to be?
○ Yes ○ No To an extent

How is a decision to promote or retain a student made?

○ By teacher on basis of objective calculation of grade averages.

○ By teacher on basis of grade averages plus:

  ○ Conference among teachers and/or guidance counselors who work with student.

  ○ Conference with parents.

  ○ Other____________________________

What is considered in a decision to promote or retain a student?

○ Teacher judgment only.

○ Academic grade averages only.

○ Academic grades weighted to stress basic skills (reading, for example).

○ Grades plus other aspects of pupil growth and adjustment.

○ Other______________________________

What is the retention rate in the district? (Provide information in the table on the next page, using most recent figures available for end of school year.)

Consider:

Does the reporting system stimulate student achievement? Or, is there a cynicism toward grades which isolates the studious pupil from his peers?

Do reports provide students the information needed for good self-direction? For counseling by teachers, guidance directors, and parents?

Do reports go out more (or less) frequently than they should? That is, often enough to serve their purposes but not so often that teachers are absorbed with rating students at the expense of time for teaching them?

Are there ways to reduce the number of times grades must be recorded, or the frequency of grade periods, while serving the same ends?

Are the grades delivered to the student in such a way that he can relate the grade directly to his performance and see why the grade is the result of his performance? (That is, does the grading system give him critical insights into his own work?) Or, is the grade an "external goal" he seeks as an end in itself?

Is there an aura of secrecy about the grades? Or, do students and teachers deal frankly and directly with each other about grades, the teacher taking responsibility to explain his judgments, the student facing criticisms realistically?

Is grade time a "dreaded ordeal" for pupil or teacher? Or, is it an on-going part of the continuous critical evaluation essential to progress in learning?

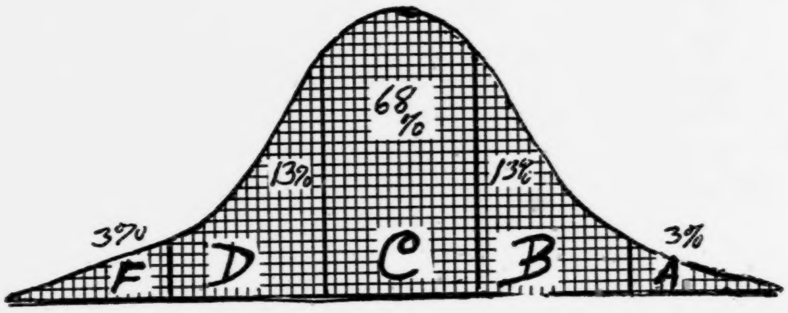
Do reports provide parents the information they should have as a basis for mutual home-school cooperation in behalf of the student?

Assuming that the primary purpose of reports is the education of the pupil--do they reflect emphasis upon the most important aspects of pupil growth? Do they ignore some--the physical, moral, emotional, for instance? Do they over-emphasize some?

Does the system of reporting support the district's statement of beliefs and objectives by emphasis proportional to priority values set up or implied in the statement?

Do retention-promotion practices in the district tend to be too strict or too easy,--in terms of best serving needs of students in light of beliefs and objectives? Are variations in the retention rates at various grade levels justifiable? If there is a tendency for the rates to be higher at lower levels, does that fact suggest that the district is alert in catching problems early? Do variations suggest need for remedial work at given levels? If so, is remedial work being done at those levels the figures indicate would be strategic? Does age of entering first grade affect retention rates?

Are attendance figures, if available, related to retention rates? (Data on attendance are gathered for another section if this survey is completed.)



PROMOTION vs. RETENTION For School Year 19___

Grade	Number Promoted	Number Retained	Total	Retention Rate (Precentage of Total Retained)	Retention Rate in Kentucky 1960-61*	Retention Rate in U. S. **
1					14.8 %	
2					7.5 %	
3					6.4 %	
4					5.4 %	
5					5.1 %	
6					4.1 %	
7					6.8 %	
8					5.6 %	
9					8.1 %	
10					6.9 %	
11					4.5 %	
12					2.4 %	
Total					6.9%	3.5-5.3 %

(Note: It will be well for those evaluating this section to have copies of report forms.)

* Source: Report of Superintendent of Public Instruction, Department of Education, Frankfort, Ky. Vol. XXIX, No. 12, December 1961, p. 1186. "Exceptional" classes are excluded in these figures.
** Recent figures not available. Ayers reported average failure rates for all grades in 1909 as 16 percent. Caswell reported it 10 percent in 1933. A 1949 U. S. Office of Education study of elementary schools in 100 cities showed non-promotion varied from 3.5 to 5.3 percent. Source: "Pupil Failure and Promotion," N.E.A. Research Division, 1201 16th St. N. W., Washington 6, D. C.

Measuring Instructional Effectiveness

The ultimate in an empirical test (the "proof-of-the-pudding-is-the-eating" kind of measure) cannot be used for education. For the test is in the lives of students, both in the school and after they leave it. It has to do also with the effect of education upon the community, state, and nation, both now and in years to come. In a sense, the test is in great part the "way of life" the school tends to create among people--and this goes beyond the immediate product, the students it teaches.

The best we can do is evaluate the "symptoms" of what the school does which we assume will contribute to its real purposes. We can assume that if students learn to read and use numbers life for them and the community will be better--and the assumption is a rather reasonable one. On the other hand, most of us would concede that intellectual and moral honesty, a sense of responsibility, and other difficult-to-measure elements are at least as important concerns of the school as arithmetic and reading skills. We simply assume--without a very sound reason for doing so, except that we have no other alternative --that what is measurable (including much we honestly cannot measure very accurately) is correlated with some important things we do not know how to measure. Because we do not know a better way, for instance, we assume that knowledge about history (somewhat measurable) has something to do with good citizenship, let us say. Since, in a general but hazy way it probably does, we shall measure what we can, at least until someone finds a better way.

Therefore, standardized test results become data for appraising the results of instruction. These should, however, be treated with circumspection, as suggested in the outline which follows. Also, certain other indices, especially related to the general goals of the schools, may be helpful. The assumption is made here that, considering the limitations our measuring instruments have, appraisals should be made with considerable humility on the part of the appraiser--but that appraisal and conscientious evaluation (particularly, self evaluation by those engaged in the educational task) is absolutely essential to improvement.

The Yardstick of Standardized Test Results

How do students in the district perform in comparison to students generally?*

Selection of a test or battery of tests for district-wide use should result from consideration:

1) That the tests have been well standardized and have well established norms with a widely representative base. (Tests should, of course, be administered carefully and through those who understand testing and proper interpretation of results.)

2) That, if several or all grade levels are to be tested, those tests used at various levels "interlock."** Usually all tests in a given subject should come from one testmaker so that differences in what they measure will be minimized. Also, it is desirable that the same test in a given subject be used throughout the district, rather than different ones in different schools. (The point is: Tests do vary in what they measure, and for comparative purpose within the district, uniformity is desirable.)

Consider:

At what levels do students of the district perform on the average*** at each grade level in each subject tested?

(Suggestion: A simple table or graph interpreting the district norms by grade and subject usually makes the data more comprehensible and provides a basis for group evaluation and study.

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* Warning: Considering limitations in reliability and validity of test results, we contend that test scores should be used only to improve the school program--not for invidious comparisons among students, teacher, schools, or school districts. Therefore, test scores of a student should be confidential among those properly concerned about his welfare. Comparisons among classrooms, schools, etc., should also be made with circumspection, a great number of variables considered when any comparisons are to be made, and related circumstances, rather than reputations, compared. Also, since test results are open to varied and even distorted interpretations, they certainly are not for public broadcast without respect to strict limitations on their meanings.

** Tests become inaccurate when used too far above or below the level for which they have been prepared--yet must provide a wide range to be useful at all. The test-maker's advice should be respected regarding what level to use a test.

*** There are several ways, of course, to express these averages. Usually raw scores and raw-score averages are in themselves meaningless.

Are there explanations for any substantial variations from respective grade-level norms? Can these be attributed to:

○ Facilities (library, laboratory, classroom) provided or not provided by the district?*

○ To teaching--to academic qualifications, experience, competence (or lack of them) of staff?

○ To home and community forces (general interest in and support for education--libraries, reading matter in homes, cultural atmosphere, etc.)?

○ To ability of students?**

○ To the fact that less competent students are encouraged to stay in school (or to drop out) so that averages are affected accordingly?

○ To the fact that retention (or promotion) rates are high (or low) so that grade-level averages are affected accordingly?

○ To the fact that the tests measure content or skills not taught or emphasized in the classrooms, perhaps missing what is taught--or, conversely, that the program is limited largely to subject matter the tests measure?

If tests are given at all levels, does learning (as indicated by test scores) take place at an even rate? Or are there levels where the students are abruptly retarded or accelerated?

Is there a balance in the emphasis given throughout the range of subjects taught, as indicated by test results? For instance, are scores low in arithmetic in comparison to reading, or in language compared to science? What are "weak" and "strong" parts of the program, as indicated by the scores?

Are variations justifiable in terms of the goals and objectives of the program? Are important but difficult-to-measure aspects being neglected in favor of what the tests seem likely to measure? Is there any tendency to "reduce" the program to teaching what the tests are expected to measure?

Are there variations in the program that might explain variations in achievement? That is, are variations perhaps related to the type of organization the school district has: 6--3--3, 8--4, or 1--12 grade groupings? (If more than one pattern is used in the community, those under different patterns should be grouped separately and compared.)

Are there variations in achievement among schools in the district? If so, to what might they reasonably be attributed? For example:

Does the grouping of students appear

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* Some evidence from studies suggests that a school with limited facilities may handicap lower-grade children little in achievement measured by tests, but limit achievement more and more at higher grade levels--as a plant may grow just as fast in the beginning in a small pot, but be stunted as its roots fill the pot.

** All so-called "mental ability" or "intelligence" tests are subject somewhat to a culture bias. Some idea of whether or not the schools are effective in terms of student capacities may be estimated by calculating the A.Q. (achievement quotient)--sometimes a laborious undertaking without machine help, though it is possible to do so. The procedure is: Calculate the A. A., "achievement age," by assuming that the average child enters school at age six, and therefore add 6 to the grade level of achievement in the subject. Achievement of 8.5 grade level is therefore A. A. of 14.5 years or 173 months. This figure divided by the students' mental age (usually obtained in process of calculating the I. Q.) provides the A. Q. --an index to whether or not the student is achieving in proportion to his mental ability. If the A. Q. is below 1.00 (100), he is learning less than he "should." If above 100, he is achieving above his average expectancy. For groups of students, of course, median mental ages may be used as divisors, with median achievement ages the dividend--an estimated median mental age being obtained by multiplying the I.Q. (as a percentage) by the median chronological age in months of the group.

It is a matter of judgement that sometimes --especially if the district is small--such theoretical calculations have limited value in proportion to labor expended. If the above analysis is made --preferably by machine processing--a sometimes useful step lies beyond it: To correlate A. Q. with I. Q.; i.e., to determine whether the "brighter" or "slower" students are achieving more in proportion to their ability to achieve. This requires treatment of individual A. Q. and I. Q., scores. If the correlations are negative, the results suggest that the district is doing better work with the slow; if positive, that it is doing better with the bright. Unfortunately, a zero correlation leaves confusing possibilities: that both are neglected in favor of the average, or both given special advantage, or all taught with equal effectiveness.

to affect the variations (size of class, size of school, and pattern of organization--i. e., 8--4, 6--3--3, or 1--12 plan)?

Do variations in community background of students appear to be related to variations in test results?

Variations in facilities?

Variations in competence of staff?

Other reasons?

Are test results used constructively to improve the program and serve individual pupil needs better?

Are individual scores kept confidential except as they may be used for the pupil? Or, do results "leak out" so that jealousies and invidious comparisons prevail--among pupils (and parents) or teachers?

Is something done about problems test results reveal, or do the results ultimately get "buried" in a file? About individual problems of students? About adjustments in the total program?

Are results used in a context of other information about the student, with test results weighed in the perspective of their limitations and the significance of what the tests measure in relation to the goals and objectives of the school?

Information Checklist

What becomes of test results?

Who receives results of tests:

- ○ Individual scores to all staff?
- ○ Summary of results to all staff?
- ○ Individual scores in given subject to teachers of that subject?
- ○ Each pupil's scores to his teacher?
- ○ To guidance director (or principal or dean)?
- ○ Each pupil's scores to his parents?
- ○ General summary of results (without individual, class, or school scores) made available to public?
- ○ To confidential file for restricted access?
- ○ Other ______________________________

How are results used:

- ○ To compare classes, or schools of the district?
- ○ To compare teachers?
- ○ To determine how the achievement levels of the students compare to those of students generally?
- ○ To determine weaknesses and strengths in the program?
- ○ To diagnose weaknesses of individual students?
- ○ To check against grading standards?
- ○ To grade students?
- ○ To classify students by "tracks" or "streams"?
- ○ To counsel students?
- ○ Other ______________________________

The Yardstick of Holding Power

Assuming that the goals of the district call for serving the needs of all educable children and youth of the district, one measure of the efficiency of the system is the degree to which it holds all students until graduation. Note that it is only one of the measures--as one measure of a good carpenter might be how little he wastes of his building materials. The "waste" in this case, of course, is human materials!

It is worth considering that the school district which boasts of scholarship winners and high percentages of graduates going on to college might properly expect also to provide evidence that its record is not made at the expense of that part of its program which is to serve the needs and interests of average and below-average students. It is to the point of determining whether or not the school has a "balanced" program in terms of serving students with a wide range of needs that this part of the evaluation is made.

How consistently does the district hold students in school from first grade through graduation?

Supply enrollments for the last twelve years for each of the grade groups out of which came the last high school graduating class. They may be arranged in the following table:

Grade	Years (a)	Boys	Girls	Total	Percentage of Beginning First Grade Groups		
					Boys	Girls	Total
1	1951						
2	1952						
3	1953						
4	1954						
5	1955						
6	1956						
7	1957						
8	1958						
9	1959						
10	1960						
11	1961						
12	1962						
Graduates	1963						

(a) Change these numbers to fit the year of the study. Also, if there have been sharp in or out migrations in the district, several samples of graduation classes should be used.

Note the population trend of the school district. (Procure population figures for a recent decade.) How much did the district gain (or lose) population during the last decade for which figures are available? Number_____. Percentage_____. (Kentucky as a whole gained 3.2% population 1950-1960. In 1961, the high school graduating group for the entire state was 61.7% of the eighth-grade group from which it came, and approximately 30% of the first grade from which it started. Nationally, about 60% of first graders finished high school 12 years later.)

Consider:

Can the "holding power" figures of the district be partially explained as part of the general population trend of the district?

Can they be explained on the basis of:

○ Limitations or breadth of curricular offerings?

○ Or of out-of-class activities?

○ Or of facilities to make these effective?

○ Or of staff resources to make them effective?

○ The economy of the district as it encourages or discourages dropping out--by work opportunities for youth before graduation?

○ The attitude of home and community toward education?

Does the district hold a greater percentage of boys or girls until graduation?

Why? Do home and community expectations of the sexes differ in a way to encourage one more than the other to stay in school?

Is the program better adapted to needs of one sex than the other (in out-of-class activities, vocational and physical education courses, etc.)?

How does the proportion of graduates going on to college compare to those of graduating classes across the state? Across the nation? (Nationally about 50% of 1960 high school graduates went on into college; in Kentucky in 1960, 36.8% did so. Nationally about 60% of first graders go on to high school graduation; in Kentucky, about 30%. See College Enrollments, Holding Power, appendix.)

Are holding power and size of group going to college related? Directly? Inversely? That is, is the district above average for one group, below for the other--or about the same for both?

Guidance Services

All teaching is guidance, so that in a sense all teachers do guidance work and have guidance responsibilities. Guidance is therefore a widely dispersed responsibility.

Since, however, students change teachers from grade to grade--and at upper-grade and high school levels, from period to period--their guidance tends to become fragmented and desultory unless some on-going coordinating and integrating operation is set up. Responsibility for guidance, therefore, should be a specialized function of the "guidance counselor" (or someone under another title who takes such a role.) This does not mean that the one so designated is alone responsible for guidance--that the rest of the staff are excused from guidance responsibilities. It does mean that responsibility focuses upon him more than upon others to help both the student and those concerned for him "see the forest for the trees." While others may deal with only "parts" of the student, the counselor is to "put him together"--or, more aptly, to help him "put himself together." Furthermore, the guidance specialist is to help the rest of the staff see their work in the context of what it means in the lives of the individual student.

Guidance as a specialized function is often regarded as new. Actually, it is as old mechanically as the keeping of permanent, comprehensive records of students, and as old in spirit as the work of great teachers who for ages have extended their concern for students beyond just teaching them subjects.

To evaluate the guidance services of the district, the evaluating group should gather answers to such questions as:

1) How is the guidance program organized? (Here a simple organizational chart, showing locations of responsibilities and relations among those involved, may be helpful. This chart should not ignore guidance functions delegated to teaching staff--academic counseling, for example.)

2) What policies govern the relationships between the guidance specialist and the teaching and administrative staff? Does the counselor, for instance, discipline students? Is he supposed to help teachers when they have problems with students--or take over and excuse the teachers? Is he expected to serve as a confidant to students, or to share all he knows with the rest of the staff? Who is responsible for use of standardized tests or for any general testing operation?

3) What information is gathered about the student? How is it organized, kept up to date, stored for future use, and made accessible for use? Are records extended to include follow-up information on graduates and dropouts? Is home background information included?

4) What are the physical arrangements for the guidance office? Are provisions adequate for security of records? Is there space for small-group as well as individual counseling, with reasonable privacy? Are furnishings appropriate to the counselor's work?

5) How is the information about students used? To whom is it available and under what terms?

6) What use is made of NDEA funds in the guidance program?

7) What working relationships are set up for referral of special problems to outside agencies and for use of special consultant resources to deal with exceptional cases?

8) What experience and preparation has the counselor (or person in such role) to qualify him for the assignment? What is the ratio of counselor (or counselors) to students he is to serve?

Consider:

Is the guidance program so organized that responsibilities for it are clearly defined, so that teachers, counselors, and administrators understand their respective roles?

Are the policies dealing with the issues outlined in question 2 above generally understood and respected? If so, do these policies operate to make the program as effective as it might be?

Is the information about the individual student so organized that it can be used effectively:

a) To help the student appraise his own interests and abilities in relation to the real world about him toward making wise choices? In planning his academic and vocational career? In making personal choices? (Is it comprehensive and arranged so that the student may get meaningful interpretations without becoming "lost" in details or terminology?)

b) To help the staff in their efforts to counsel the student?

c) To provide usuable and appropriate information to prospective employers of students, with the ethical line between "public" and "confidential" information respected.

Is the information about groups of students so organized that it can be used effectively?

a) In adjusting the program of the schools to better meet students needs?

b) In appraisal of the school program and in research toward long-range planning?

Is the program integrated throughout grades 1-12? Is there any breakdown in articulation between elementary and junior and/or senior high levels? Are cumulative records maintained throughout?

Is all the recorded information essential, and all that is essential recorded? Is effort expended in keeping some records proportional to their value? Is important information left out? Are there duplications of information of similar nature and use? Are these duplications necessary --to reinforce judgments, for instance?

Does the guidance program support a wholesome, "good faith" relationship between counselor and student? Is guidance sometimes identified with discipline--to an extent that students who have problems are alienated and discouraged from seeking counsel?

Is follow-up on dropouts and other problem cases effective in extending the service to the limit of the school's responsibility? In providing information helpful in appraising the school program? Are home contacts made, especially for problem cases?

Does the guidance operation serve the vocational counseling needs of students? Is there an organized effort to acquaint students with the edcational and vocational opportunities beyond the school? Is it effective? Are facilities set up to help employers obtain qualified personnel, and to help students find positions to which they are fitted?

Is the person responsible for guidance adequately prepared?* Is his position "protected" from too great encroachment by extraneous or irrelevant assignments, so that his essential assignment is of manageable proportions? Is the number of students he serves reasonable? Do others of the staff understand and respect the necessities of the guidance function and the responsibilities of specialized guidance personnel? Do they feel themselves a part of the over-all guidance program? Or do they regard their work--in academic counseling, for instance--as extraneous?**

Are NDEA funds used to the limit for whatever advantages are available to support and improve the guidance program?

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* Currently (1963) the Standard Certificate for Guidance Counselor in Kentucky requires a teaching certificate based on a four-year college degree, plus three years of experience (at least two in teaching) and 24 additional semester hours of graduate study planned for counselors.

** A ratio of one counselor to the first 300 students is a minimum recommended by national accreditation agencies for the high school. Unless responsibilities are dispersed in an organized manner (with "home-room" or other such plans) other counselors should be added when enrollment is 500 or more. The number, however, should depend upon the type of organization, especially the degree of teaching staff involvement.

The Kentucky Department of Education suggests a ratio of one counselor to each 400 pupils in high schools, or one to each 800 in elementary.

Does the staff respect its own limitations--in dealing with serious deviant behavior--by prompt referral to outside agencies--when services beyond the scope of the amateur psychiatrist or caseworker are needed? Is there a continuing working relation between staff and such agencies so that the student is not left "in between" with responsibility for his welfare unattended?

Does the program match actual outcomes?

The purpose in this sub-section is to get some idea of what happens to the graduates of the schools of the district and to relate what happens to them to the kinds of experiences the district provides students. There is always the possibility, of course, that a graduate becomes either an outstanding citizen or a criminal in spite of, rather than because of, what he gets in school. Further, it is assumed that the school is sure to offer opportunities which some exploit while others do not. Nevertheless, an obvious basic assumption in the entire idea of a school is that what it accomplishes is evidenced in the lives of its graduates.

Does the district provide a program to support the plans students have for their lives?

Indicate the educational plans beyond graduation of the current twelfth-grade classes of the district:

Educational Plans of Senior Class

	Number		Percentage of			
	Boys	Girls	Boys	Girls	Number	Percentage
To attend 4-year college or university with special academic requirements						
To attend 4-year college or university with general high school graduation requirements						
To attend junior college						
To attend special vocational school (business college, nursing college, technical training programs, etc.)						
To continue study, but plans uncertain						
Not planning any formal education beyond high school						
Totals						

Indicate the vocational plans of the current twelfth-grade class of the district?

Vocational Plans of Senior Class

	Number		Percentage		Totals	
	Boys	Girls	Boys	Girls	Number	Percentage
"Professional" (including all those requiring a minimum of four years of college preparation or its equivalent, plus specialized study)						
Semi-technical and skilled—requiring some special training and study beyond high school, but not a college degree						
Jobs available without specialized training beyond high school (though experience may lead to advancement on the job--i.e. clerks, filling station attendants, bus drivers, etc.)						
Military service as career not requiring college preparation						
Farming						
Housekeeping						
Other						
Unknown						
Total						

Indicate the vocational and educational selections actually made by the members of one of the high school graduating groups of the last three years.

ACTUAL EDUCATIONAL AND VOCATIONAL SELECTIONS OF HIGH SCHOOL GRADUATES OF 19____

	Number	Percentage
Attending college		
Attending vocational school or in apprenticeship training		
Doing semi-technical and skilled work (not requiring a college degree.)		
Doing unskilled work (requiring no specialized training beyond high school)		
In military service		
Housekeeping		
Unemployed		
Other		
Unknown		
Total		

Consider:

Do the curricular and out-of-class offerings of the district appear to provide opportunity for students in terms of their educational and vocational plans (as indicated in the first two tables)?

Do the plans appear to materialize--as indicated by comparing their plans to what graduates actually turn out to do? Are there discrepancies? If so, how may they be explained:

○ Technological and economic changes of community and nation?

○ Failure of school program to provide offerings to fit student needs as represented by their plans?

○ Failure of school to guide students realistically?

○ Home and community pressures directing students toward unrealistic goals?

○ Other?

How does the proportion of graduates going on to college compare to that for the nation (about 50%), and for Kentucky as a whole (about 37%)?

How does the proportion going on to college compare to the proportion of the school program given to college-preparatory courses?

Daily Schedule and School Year

Generally the daily school schedule is "tailor cut" to fit a particular school. Only very general criteria, therefore, can be used in judging a schedule. Furthermore, the respect given the schedule once it has been set up, since some variations are sure to be necessary, may be an important consideration.

The group doing this evaluation should collect copies of the daily schedule and school-year calendars of all the schools of the district and examine them with such questions as:

1) Do the schedules provide a satisfactory minimum of "instructional" time--time used for class work or study as distinguished from lunch or bus-loading periods, recreational or recess periods, periods for passing from class to class, or periods for non-credit activities? Are lunch periods or recesses, for instance, counted as "instruction"?

> Note: The minimum instruction time daily in Kentucky is by law 6 hours. There are variations in interpretations, however: Some include passing time between classes, reducing the actual instructional hour to 50 or 55 minutes. Some supervise recess and lunch periods, calling them "physical education" or "health." Some regard "home room" periods, for guidance and study, as legitimate instructional time; others do not. Also, "floating" periods, for club and other activity meetings, are counted by some, excluded by others, or are made part of an extended school day by still others. The daily schedule can be evaluated honestly only as such variations are considered.
>
> Although prevailing practice represents no sacred standard, some norms* which provide a basis for comparison are:
>
> Among six groups of urban centers classified by size, the median school day for pupils, including lunch and recess periods, ranges from 6 hours, 17 minutes for first graders in Group I (centers of 500,000 or more population) to 7 hours, 6 minutes for twelfth graders in Group VI (centers of 2,500 to 4,999 population). Smaller centers tend to have slightly longer school days, and the day tends to be lengthened as grade levels go up. Medians for all urban districts range from 6 hours, 29 minutes for first graders to 6 hours, 58 minutes for twelfth.
>
> The teacher's school day averages about one hour longer at all levels.

2) Are the schedules simple in design so that conflicts and complexities can be kept to a minimum?

3) Are there reasonable provisions for "breaks" in the schedule (for physical activity or relaxation, expecially for younger students) and for passing time between classes? That is, does the schedule suggest a wholesome, alert, energetic flow of activity;--or, in contrast, is the day on the one hand a nerve-straining "marathon," or on the other, drawn-out with too much time wasted in waiting or moving between classes?

4) Do the schedules provide reasonable opportunities for staff to plan or to "collect their wits" in a few moments from duty now and then?

5) Are period lengths adapted to the maturity levels of students--assuming that younger elementary children need shorter periods of concentration.

6) Are schedules of the various schools adjusted to the requirements and reasonable conveniences which grow out of the transportation schedule, so that waiting time for students, before and after or en route to school, is kept to a minimum. (Some districts arrange for different schools to begin the day at different times to fit to bus schedules.)

7) Does the school-year calendar provide a satisfactory minimum of school days so that, considering provisions of the daily schedule, instruction time is adequate?

> Note: Prevailing practice is illustrated in these averages for length of school year in 1959-60, excluding "in-service" or "professional" days when pupils do not attend: **

United States	178.0 days
North Atlantic States	180.0 days
Southeast	173.9 days
Kentucky	169.2 days

The school-year calendar, like the schedule, is variously interpreted and applied in practice. The minimum school term by law in Kentucky is now (1963) 185 days, including 4 holidays for which school may actually be closed and as many as 6 days "for in-service training and professional work" and for "attendance at state and district meetings of professional educational associations." Also, first and last days, usually used for registration and reporting grades, are classified as part of the school year. ***

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* Educational Research Service Circular, No. 7, 1960, published by American Association of School Administrators, 1201 16th St. N. W., Washington 6, D.C. Data are for 1958-59.

** Digest of Educational Statistics, U. S. Office of Education, Washington, D.C., Bulletin 1963, No. 10., OE-10024.

Considering both the daily schedule and the school-year calendar:

8) Is the time set aside for performance of the vital tasks of the school adequate? Are enough "cushions" (in terms of longer-than-minimum day or year) provided so that emergencies and unexpected events which compete with instructional time can be "absorbed" without encroachment upon an agreed-upon standard for classes and study?

9) What policies are maintained to protect the schedule and calendar? Are classes ever dismissed for special events or unexpected celebrations? If so, do these more than "absorb" any "safety" margins in the schedule and calendar?

10) Furthermore--since the problem here is one of providing a schedule so that instruction can be planned and given continuity--are classes interrupted unduly? By irregular interruptions for announcements? By special assemblies? By authorized dismissal of some students for other purposes? (It should be considered that interruptions to the continuity of class work may be "damaging" all out of proportion to their length.)

Out-of-Class Activities

This section of the evaluation is based on these assumptions:

1) That out-of-class activities are justifiably included as part of the school program because and only as they contribute to the objectives of the school.

2) That, properly administered, they supplement, but do not compete with, the class program.

3) That they are a means for dealing with individual differences and for serving exceptional student needs; nevertheless, the degree to which student participation is wide spread is an index to how well they are serving.

4) That they are essential in determing the quality of morale among students and in building a working unity among students and staff.

5) That they affect the values, "hero images," and guiding precepts which students hold.

What is the range of activities and of student involvement in them?

A plan for gathering data to answer this question is represented in the table which follows.

It is usually better to prepare separate tables for elementary, junior high, or senior high levels; or in some instances, tables for separate schools.

The table (pp. 27-28) provides no way of checking duplicates--that is, how many students participate in more than one activity. Yearbooks of high school senior classes often report number of activities in which members participate, but the data are not readily available ordinarily for other students. A simple questionnaire directed to individual students, or to teachers in elementary schools, is perhaps the best way to obtain the information, unless it has already been gathered for other purposes. The questionnaire should call for:

1) Names of activities in which each student is participating.

2) Offices or special assignments each student has in these activities.

3) Names of other activities in which the student would like to participate if possible.

The first item calls for data for finding out how many students engage in many or in none or few activities. Some attention should be given to the kinds of activities also, as indicated by the second item, to determine whether or not they are kinds which actively engage the students, or are simply "belonging" activities, such as passive class or club membership. Item three should provide suggestions for extending, if such seems desirable, the range of activities, or arranging so that more students have them available. A frequency table for each of the items provides a way to organize the information. The tables may interpret, for instance:

*** Since 1961 the Kentucky minimum required is 175 actual instruction days, which is now the median among Kentucky districts. That is, more than half the districts have 175 days in session, while the others have more.

For item 1: Proportion of students involved in a given number of the activities.

For item 2: Proportion of students who are "belongers" only or mostly.

For item 3: Frequency of reported interest in activities not now available.

What is the administrative framework for out-of-class activities?

How is time provided for out-of-class activities?

- ○ "Activity" period as part of schedule?
- ○ Free periods of individual students?
- ○ Student released from class time on individual basis?
- ○ Classes sometimes released for special events?
- ○ Non-class time (before and after school hours, weekends, recess or lunch periods)?
- ○ Other arrangments? ____________________

Are there any restrictions on freedom of students to participate in out-of-class activities:

- ○ Required grade average?
- ○ Student limited in number in which he can participate or offices he can hold (point system, for instance)?
- ○ Counselors (or teachers or principal) advise students regarding participation?
- ○ No limitations?
- ○ Other? ____________________

If school bus transportation is provided in the district, how are after-school activities affected by the bus schedule?

Under what terms are school buses made available for out-of-class school-sponsored activities (class trips, athletic teams, band tours, etc.)?

What supervision is required for out-of-class activities? At school? Away from school:

If there is a "student government" or Student Council, what is its role in "governing" the school?

What are typical costs to students for participating in out-of-class activities?

A thoroughgoing survey of expenses to students required for all activities is likely to be more time-consuming than the purposes here warrant--though the undertaking is not to be discouraged. It is likely, however, that studies of expenses for a few major activities will suffice. A simple questionnaire to all the students in the activities to be studied should call for:

1) Amount of annual dues or initiation fee, if any, paid by the student.

2) Amount of any special assessments, already paid or anticipated, for field trips, gifts to sponsors, special awards, parties, etc.

3) Estimated amount of miscellaneous expenses paid by the student incidental to participation, such as membership pin or ring, uniform, special clothes, award symbol, instrument, materials, car fare, and the like.

Averages of total expenses should be calculated for each activity to provide typical expense requirements for participating students.

How are assemblies and convocations administered?

About how often are assemblies or convocations held? ________per year.

Are assemblies usually scheduled or called on short notice?

○ Always scheduled.

○ Usually scheduled but occasionally on short notice.

○ Mostly unexpectedly.

To what extent are student involved in assembly or convocation programs?

○ Entirely.

○ In planning and some participation.

○ When especially assigned only.

○ Never.

What programs are used most frequently? Indicate: F-frequently. O-occasionally. N-never.

_____Speaker from outside community.
_____Speaker who is community leader.
_____Talent group from outside community.
_____Talent group from community.
_____Staff speaker or talent group.
_____Student speaker or talent group.
_____Administrative operations--to explain, problems, rules and routines to students.
_____Other______________________________

____

How are assemblies planned and arranged?

○ By administration.

○ By a staff member specially assigned.

○ By student committee (perhaps with a teacher or teachers advising.)

○ Other.______________________________

____

What is the subject or general character of assemblies? Indicate: F-frequently. O-occasionally. N-never.

_____Religious or moral.
_____Civic--social--political--cultural--intellectual.
_____Entertainment of "light" character.
_____Entertainment of "serious" character.
_____"Rally" or "pep" session.
_____Forum or discussion of school problems.
_____Other______________________________

____

Are there activities, whether formally organized or otherwise, which involve students and "attach" themselves directly or indirectly to the school without its recognized sponsorship?

For example, are there "fraternities" or "sororities," "hot rod" clubs, fad groups, social cliques, or religious or special campaign groups? If so describe:______________________________

____

____

____

Does the activity program serve the objectives of the school?

Although it is not suggested here that the staff prepare any formal statement of objectives for the various activities, the matter of whether and how they serve, or fail to serve, the objectives set up in the statement of beliefs and objectives is certainly pertinent. Some consideration by the group doing the evaluation may well raise the question about any given activity which, on its face, seems irrelevant to the statement--and call for a statement of objectives from these responsible for the activity. This statement should be "squared" with the district's statement.

Consider:

Is the range of activities broad enough to serve a wide range of interests and needs of students?

Is the range of participation balanced? That is, do most activities get substantial participation, or do a few absorb most of the energies of a great many of the students? Do athletics, or music, or speech "steal the show" to the extent of representing over-emphasis?

Are there many students who participate not at all, or little--while a few "monopolize" the activities?*

Is the nature of participation generally one of actual involvement--or do too many participate simply as "on-lookers" or "belongers"?

Are adequate measures used to keep the program in balance, either in limiting the over-active or encouraging the non-participant?

---

* Studies show the prospective dropout to be a non-participant in out-of-class activities.

Can more restrictions be imposed without destroying desirable "spontaneity" in the participants? Can counseling be made more effective?

Does the activities program "compete" undesirably with the academic? Are interruptions of classwork too frequent? Or too irregular--so that continuity of class work is difficult to maintain? Or study time interrupted--recognizing, of course, that activity experiences do have value?

Can school bus or class schedules be adjusted to support wide participation and yet preserve a balance with the academic program?

Is supervision of activities adequate--considering that students themselves must learn to take responsibility if the program is to be effective?

Is "student government" real--in the sense that students have a representative voice in decisions and have real authority commensurate with any responsibility delegated to them? Or is it "make believe," with little latitude given students to voice opinions and their responsibilities limited to "policing" to enforce decisions of which they have had no or little part? That is: Are students "partners" in the school community, or are they just "practicing" democracy?

Do costs prevent some students from participating in some activities? Students who especially need the experience? If so, are special arrangements available for those who may not be able to afford to participate to do so without embarrassment? Could costs be lowered? If costs were lowered or eliminated, would the activity lose some of its value? Would lowering costs encourage the "free ride" philosophy?

Does the assembly or convocation program serve to enrich and broaden student perspective by what it brings from the "outside" world? Does it give student talent an opportunity to develop? Does it strengthen the school community? Does it ever evoke an uncritical, "mob" spirit in that unity?

If there are unsponsored student groups,--including "secret" organizations, fad groups, or informal cliques--what is their effect upon the "hero patterns" and social, cultural and moral values of students? Do these groups operate apart from the school program or do they influence attitudes toward--or even elections in--sponsored organizations and the school generally? If so, is the effect good or bad? Can the school do more to encourage the good and restrain the bad? Is the school's policy clear in dealings with such groups?

What is the community's relationship to the out-of-class activities? Do fans and eager parents support the activities? Do enthusiasms from outside ever overwhelm the school and its responsibilities? (For instance, do athletic or music enthusiasts ever attempt to influence administrative policy? Do "social climbers" ever press for more and bigger affairs which give status to "little aristocracies" or social cliques among students?)

In general, what kind of ethical-moral-civic climate do the out-of-class activities support? Are the roles it creates for students representative of wholesome, democratic ethical values; or, do they incline toward "stampede" methods of leadership or fad "crazes"--or, conversely, toward an uncritical complaisance?

Does the school have clearly established policies to guide the out-of-class program? If so, do those policies deal adequately with:

1) The problem of making activities open to all students who would benefit by them --regardless of economic or social status, for instance?

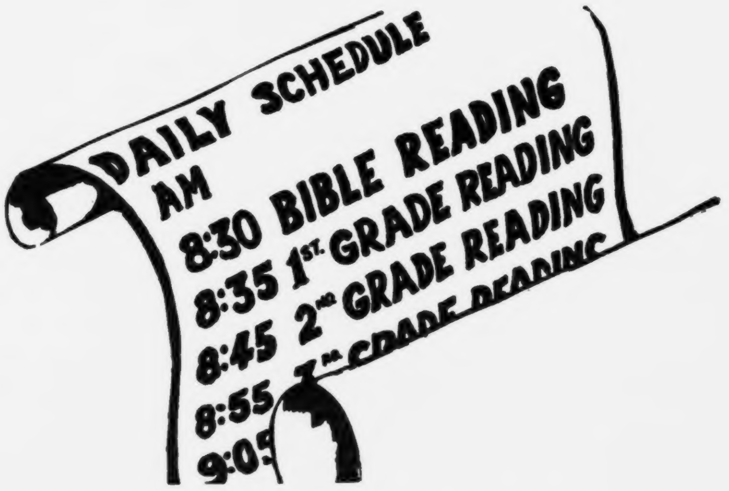
2) The problem of justice in distributing access to school facilities fairly (the stage, the school bus, the gymnasium, etc.) to all groups?

3) The problem of accounting for funds and holding activity groups fiscally responsible?

4) The problem of balancing student responsibility with proper staff supervision?

5) The problem of scheduling and controlling activities to protect the integrity of the classroom?

6) The problem of protecting the activities program from outside interference with due consideration of the desirability of community cooperation and support?



PARTICIPATION IN OUT-OF-CLASS ACTIVITIES

For grades:

Total enrollment in school (or schools) included here:

Boys * Girls ** Total boys and girls

Schools included:

SPORTS	Boys	% of*	Girls	% of **	Total	% of
Football						
Basketball						
Baseball						
Track						
Others:						
SPORTS "FAN"						
"Pep" Club						
Other:						
FINE ARTS (in activities beyond earning academic credit)						
Chorus						
Orchestra						
Band(including majorettes)						
Art						
Other:						
STUDENT GOVERNMENT						
Student Council						
Other:						
CLASS ORGANIZATION						
Senior						
Junior						
Sophomore						
Freshman						
Other:						

PUBLICATIONS	Boys	% of Boys	Girls	% of Girls	Total	% of Total
Newspaper						
Yearbook						
Other:						
SPEECH-DRAMATICS						
Class Plays						
Drama Club						
Debate						
Forensics						
Other:						
CIVIC						
Hi-Y						
Key Club						
Other:						
"ACADEMIC" AND "HOBBY"						
Junior Academy of Science						
Math Club						
Biology						
Other:						
VOCATIONAL						
FHA						
FFA						
4-H						
Other:						
OTHER MISCELLANEOUS						

Library and Teaching Aids

The prime tools of teachers for ages have been books. The library, therefore, is an important "tool center" for the educational program. New kinds of teaching tools, often added to the library to make it a repository and center for a wide variety of teaching tools in addition to books, are increasing in number and variety and properly take their place in the repertoire of the skilled teacher who uses whatever is available for more effective teaching.

Regardless of whether or not most teaching aids and materials are centrally administered, there will always be some kept in the classroom or dispersed about the school at points where they can be best used. To get a comprehensive view, therefore, of the quantity, quality, and availability of teaching tools, the evaluating group must not overlook such facilities as laboratories, special classroom equipment, teaching machines, audio-visual devices, physical education apparatus, etc., wherever they are in the system. Also they must consider how these facilities are administered and used.

Information should be gathered to answer such questions as:

Physical Equipment and Materials--

(1) What kinds of equipment and materials does the district have? (A detailed inventory should be available to the evaluating group. If it is not, some listing typical of the different grade levels should suffice. If the district is large, a detailed list may need to be broken down into general classification so that some perspective of what gets emphasis and what gets "left out" in the expendure of funds for equipment and materials may be determined.)

(2) Does the system have arrangements for borrowing or renting films, recordings, etc., from educational-materials libraries? If so, how does the arrangement operate? Are funds available for rentals and mailing--and how are they administered?

(3) What routines are required in obtaining, or obtaining use of, equipment for classroom use? How is responsible accounting (for damage, loss, or prompt return) maintained? If equipment is limited, what priorities determine who gets to use it? Who controls and accounts for the equipment?

(4) How are materials and supplies (consumables) distributed and responsible accountability maintained? What priorities determine the distribution? Who controls the distribution and accounting?

(5) What is the physical character of the libraries of the schools being studied? Here is a check-list of items and questions which may be applied to each library.

_____How large is the space provided?*
_____The seating capacity (with adequate table space)?*
_____Is the library conveniently located in the plant?
_____Is the library used for a study hall?
_____Is lighting adequate? (Minimum of 30 foot candles on reading tables.)
_____Adequate shelving for books?
_____Magazine shelving?
_____Newspaper rack?
_____Adequate tools for the librarian's work, such as:
    _____Vertical files?
    _____Card catalogue cabinets?
    _____Bulletin boards?
    _____Atlas and dictionary stands?
    _____Book truck?

Librarian's work-use space, such as:

    _____Work room?
    _____Office?
    _____Classroom (for instruction of classes on use of library)?
    _____Audio-visual storage space?

(6) What services does the library provide students and staff?

Note: The proper selection, classification, cataloging and shelving of books is a specialized, detailed function requiring both trained personnel and considerable labor. Usually those doing the evaluation may well depend upon descriptive reports from the librarian to get some picture of how adequate is the system of serving students and staff and the quantities and qualities of the book collection.

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*State Department standards for "Comprehensive" and "Standard" high schools call for 25 square feet per person, with a limit of 100 persons per room; and the library should be large enough to seat 15 percent of the enrollment at one time.

_____ Total books, properly classified, catalogued and displayed?

_____ Total non-approved (out-dated. inappropriate) books included in above?

_____ Total bound volumes of magazines and newspapers?

_____ Number of different encyclopedia series provided?

_____ What is the copyright date on the most recent series?

_____ To how many newspapers and periodicals does the library subscribe?

_____ Is the Readers' Guide to Periodical Literature provided, with continuing subscription to keep it up to date?

_____ Number of different magazines and newspapers kept and bound into volumes?

_____ Are recent issues (before binding) of newspapers and magazines shelved and made available?

_____ Are reasonably current dictionaries, atlases, biographical catalogues, etc., provided?

(7) Is library used for other purposes than distribution of books and other teaching aids? (For instance: study hall, sale of supplies, etc.)

(8) What financial support goes to library and teaching aids?

(9) What use is made of NDEA funds in obtaining books, supplies and equipment in the science, foreign language and mathematics areas?

Note: In Kentucky the minimum foundation allotment of $900 per classroom unit for "other current expenses" (excluding teacher salaries and capital outlay) is popularly regarded as the basic source of funds from which supplies, materials, library books, and special teaching aids may be purchased. Actually, however, much of the allotment is taken, in most instances, for light, heat, janitorial services and supplies, and such classroom necessities other than teaching aids. Additional funds for teaching aids must come, of course, from whatever revenue is available after the local district has met its foundation obligations, or from contributions from PTA or other civic groups, from school money-making projects, or from charges made directly to students.

_____ How much is spent per child in average daily attendance per year for teaching aids and materials?

_____ What percent of the total operating budget of the district goes for teaching aids and materials?

How much is spent per child in average daily attendance for library books:

_____ In elementary schools?

_____ In junior high schools?

_____ In high schools?

_____ In district as a whole?

Consider:

Is the district investing in the most needed and useful materials and equipment? Are some just "gadgets" or "fads"? Are "essentials" sacrificed for things which make more "display"?

What emphasis appears in the investments in materials and equipment? Do some parts of the program "starve" while others get enough? Are those given most support those which, in terms of the statement of beliefs and objectives for the district, deserve priority emphasis?

Are procedures for getting use of teaching aids and materials as simple and convenient as they can be, consistent with checking against damage, loss, or delay in returning borrowed equipment?

Are supplies and equipment distributed "fairly"--considering that a treat-everyone-alike arrangement may not necessarily distribute things where they will serve the greatest educational need?

Are arrangements for borrowing or renting films, recordings, etc., from outside libraries such that teachers can conveniently use them ? Are they given proper instruction and encouragement (funds available, for instance) to make the best use of such materials? Have comparative advantages of owning opposed to renting such materials been weighed?

Are school libraries adequate?

○ In space?

○ In general furnishing for a working atmosphere?

○ In special library facilities to help the librarian work effectively?

○ In provision of up-to-date, appropriate books and other materials adapted to levels of interest and ability of students?

○ In provision of indexing and cataloging files and volumes, to encourage students to do research and to document sources of information?

Is the library used to best advantage? Do such uses as for study hall, special meetings, or vending of supplies compete with its primary function as a center for instructional aids?

Do the district's expenditures suggest that its support of the library is comparatively adequate?*

Do the district's expenditures for all teaching aids (supplies and equipment) suggest that the funds budgeted for such purposes are "in balance" in comparison to the budget items?

Are students charged for supplies and materials to an extent that results in hardships to individuals? Or, to an extent that some students may avoid courses requiring such charges?

Is full use made of NDEA resources for procuring supplies and equipment--considering, of course, needs outside areas covered by NDEA?

Are there contributions from outside groups or special school projects for materials and equipment to enrich the program? Are they effective in actually enriching the program or do they simply displace district funds to allow them to be used elsewhere?

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* Prevailing practice: In 1962-63 in Kentucky, high schools spent an average of $1.80 per pupil for library materials; elementary schools spent $1.32. Averages were $1.70 for high school and $1.30 for elementary in county districts, $2.02 and $1.37 respectively for independent districts. These exceed the $1.50 per high school and $1.25 per elementary pupil minimum recommended by the State Department of Education.

New (1963) standards, recommended by both the State Department and the Southern Association of Colleges and Secondary Schools calls for high schools to spend:

Up to 500 enrolled--$2.50 per student.
501-1,000 enrolled--$1,250 plus $2.00 for each student above 500 enrolled.
1,000 plus enrolled--$2,250 for first 1,000, plus $1.00 per student above 1,000 enrolled.

American Library Association standards call for:

$1,000 to $1,500 spent annually for 200-249 pupils.
$4.00 to $6.00 per pupil when 250 or more are enrolled, plus funds for encyclopedias, dictionaries, magazines, pamplets, rebinding, supplies, and equipment.

Section II—School Staff

James A. Garfield's famous comment, that he would take Mark Hopkins "on one end of a log" in preference to lesser teachers with ample classroom and other facilities, has been variously interpreted. Certainly Garfield's point in making the teacher central in education is undebatable, --a point unrelated to the possibility that Hopkins might have preferred more than a log, and might have been a better teacher if he had had appropriate libraries, laboratories, texts, and other teaching tools.

Evaluation of the staff starts with full recognition that persons are the fundamental resources for education. The first step, therefore, is toward getting some idea of what the staff are like in terms of their professional preparation and experience, and also of their personal qualities. Further, the attempt is to examine the "log" they sit on--their working conditions, their place in the school and community. Also, we are concerned about whether or not they are growing professionally to become continually better teachers!

It should be conceded here that evaluation of teachers and teaching involves judgment, opinion, estimates of intangibles. The best teacher is not necessarily the one who has the most college credits or experience, or belongs to the most professional organizations, or has been most active in professional improvement activities. On the other hand, it is assumed that there is a general correlation between such "signs" and teacher competence, that while there are indeed superior teachers who lack the objective evidences of preparation and experience, and inferior teachers who have them, in general, competence and these objectively definable "signs" are related.

Information to complete the tables on pages 34-36 should be gathered for each level--elementary, junior high, senior high.

Consider:

Total compared to district teaching experience: Does the district "import" enough teachers from other districts to:

1) Guarantee that pupils are exposed to teachers of varied geographical and cultural backgrounds?*
2) Indicate that it competes with other districts in getting superior teachers? (If few teachers have had experience teaching elsewhere, the implication is that the district is not competing well.)

Age pattern: Does the district hold teachers during "most productive" years--or do data suggest that the district is a "training ground" for beginners who leave after a few years--and an "opportunity" mostly for those who have had other careers and have returned to teaching? (If numbers at lower and higher ends of age scale are greater than those in the middle, such may be the explanation.)

Teacher "turnover": Does the district retain a substantial number of teachers--presumably the "good" ones--and release some "mediocre" and "poor" ones? Is the teaching staff reasonably stable in personnel? Or--to over-state the converse question--are students exposed to a changing "procession of teachers"? (Obviously the answers to these questions call for judgment even if a detailed study is made of why individual teachers leave the district, which could be another way of examining the problem here. A district with no staff turn-over would stagnate; yet a stable, hard-core staff is essential for cooperative planning, staff and student morale, and continuity of program for students. (The "turnover" figures are only a clue to what is actually taking place.)**

Sex ratio: Are pupils exposed equally to both male and female teacher personalities? Should they be? (In 1959-60, about one in every seven--14.1%--elementary teachers in the U. S. was a man; in high schools, over half--52.7%--were men.)***

Foundation rank: How do preparation levels compare to those of other districts? The state? The nation? (In 1961-62, 71.4% of Kentucky elementary and 97% of high school teachers held bachelor's degrees--(the Rank 3 requirement); for the U.S., the respective figures were 92.6 and 95.7).

Comparisons of data for different levels: Compare the data for elementary schools to those for junior and senior high. Do they tend to favor higher levels? That is, are high school teachers generally of higher Foundation rank, etc.? If there are differences, why? Should they exist? Is preparation as important for elementary as for high school teachers? Is quality of instruction as important?

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* It is worth considering that many good "native" teachers, who might otherwise be lost to the district unless its salaries approach national averages, may be retained because they are "natives" or have community ties which hold them. It should not be taken that such teachers are not desirable--especially if they have taught elsewhere or broadened their experience by travel and study.

** Throughout the nation, 17.0 percent of public elementary and high school teachers left their positions between Fall 1957 and Fall 1958--either leaving the profession or transferring to other districts. Source: Teacher Turnover in the Public Schools, 1957-58, U.S. Department of Health, Education and Welfare, Washington, D. C., Circular No. 608, OE-23--2. p. 11.

*** Calculated from data in Digest of Educational Statistics, 1963 Edition, U. S. Department of Health, Education, and Welfare OE-10024-63, p. 91.

Teacher-Pupil-Classroom Ratios

Depending upon how intensive the study here is to be, the data for the table which follows may be applied to individual schools or to the district as a whole. Some districts have satisfactory pupil-teacher ratios over all, for instance, but have some teachers overloaded, others with too few students. A district with several one-room schools may well have a difficult problem in balancing load at the elementary level. At the high school level, the schools "stretching" their offerings (perhaps to meet accreditation requirements) may have several small classes for elective courses, then be forced to overload required course classes in order to obtain a desirable over-all ratio. A report for each school will reveal such a condition at the elementary level. For the high school, a report of the pupil load by classes for each individual teacher may be in order if there is any reason to be concerned about load-balance.

Gather the information required by the questions below by a simple questionnaire addressed to principals:

How long is the school day (including lunch, recesses, supervised study, play or bus loading)?

How much time during the school day is the average teacher: Teaching? Supervising play, lunch, etc.? "Free" or planning?

How much time per day, on the average, does each teacher spend without extra pay directing activities beyond the school day (coaching athletics, debate, dramatics, music, journalism, etc.)?

What percentage of teachers are so involved?

What is the least time spent?

What is the most? (Information here should be separated for elementary, junior, and senior high schools.)

How many different preparations (for different courses) does the average high school or special subject teacher have to make daily--as opposed to teaching only one subject or one class throughout the day?

Consider:

Teacher-classroom ratio: Does each teacher have "his own" classroom--for planning during free periods or before and after school? Or, does he have to carry equipment, books, etc., from one room to another?

Teacher-pupil ratio: Are the numbers of pupils "balanced" among teachers? (Small schools, particularly, often face mean choices between proper grouping of students and preserving class enrollment balances.) Are imbalances justifiable in terms of special subjects taught or need for homogeneous grouping? How do over-all ratios compare to the district, state, and national averages?*

Off-duty time: Are provisions for "breaks" during the day adequate, considering profession preparation and personal needs--or is it a "marathon" of unrelieved tension?**

Activities beyond the school day: Is the "activity" load too heavy? Is it distributed fairly? If teachers are not given "extra pay" for directing activities, is such work considered in the salary schedule or in promotions?

Teacher preparations ratio: Do high school teachers have too many different preparations--or enough to prevent monotony and stimulate growth of wide interests. (If several preparations are required, does the teacher have planning time and space?)

Staff Salaries, Preparation, Retention

Provisions for comparing salary levels and trends for the district appear in the section on finance in this manual. It is desirable for those doing the evaluation here to have such information and also to have copies of the district's salary schedule. The questions listed below should be referred, of course, to the district's schedule.

What is the salary schedule for teachers "weighted" to reward:

○ College preparation as required under the Foundation program?

○ Experience in the system?

○ Experience elsewhere?

○ Summer or spare-time study for credit beyond (or except for) that required to satisfy the Foundation Program requirements or achieve higher Foundation rank?

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* In 1961, the average U.S. teacher had 25.6 pupils per class; Kentucky teacher, 26.3 according to Ranking of the States 1961-63, NEA Research Reports, NEA, 1201 16th St., N. W., Washington 6, D. C. According to the same report the average teacher devotes 47 hours per week to duties connected with his work--the elementary teacher more (48 hrs., 30 min.) and the secondary less (45 hrs., 54 min.).

** Length of the school day is treated in the section on program of this manual. See page 22.

○ Study or professional participation (study committees, in-service work groups, etc.) not for college credit?

○ Travel or other activity not for college credit?

○ "Merit"--as estimated through use of some objectified scale?

○ Other:______________________________?

What is the highest possible increment per year of service in the district?

How long before one might at the fastest pace possible reach the ceiling?

What is minimum increment per year if one stays in the system?

How long before one might, at the slowest pace, reach the "ceiling"?

If a teacher achieves higher rank under the Foundation Program, does he receive an increment greater than the difference between his old and new rank minimum salary?*

Consider:

Is the schedule "competitive"? That is, is it high enough to attract competent teachers in competition with surrounding districts, the State, the nation? (The average Kentucky teacher's salary in 1960-61 was $4,102; the U. S. teacher averaged $5,716.)

Does the schedule "hold" good teachers--rather than drawing in the beginners who later go elsewhere because increments are too small? Does it make teaching in the system an attractive career for competent teachers? Might a schedule which "jumped" a teacher's salary sharply after a probation period of, say three years, tend to hold the more competent?

Does the schedule stimulate teacher growth by rewarding "merit"? Further study? Self-improvement activities, such as travel and professional participation?

Does the schedule foster good morale, a feeling that good work is valued and that rewards are fairly assigned? If not, is the weakness in the amount the schedule provides, in the schedule itself, or in the way it is interpreted or administered?

---

* If the district is under the Foundation program the State increases its contribution to pay all the difference between the new rank minimum and the old (now in 1963, $300 between ranks III, IV, and V)--so that unless the district raises the teacher more than such an amount, the local district has done nothing to reward the teacher for qualifying for higher rank.

AGE, SEX, PREPARATION OF TEACHERS

(Make frequency distributions by supplying the numbers; or make a tally, then translate into numbers in each category; then translate them into approximate percentages of total staff, or make simple graphs of the data.)

Years of Age	Number of Men	Number of Women	Number of Both Sexes	Number in each Foundation Program Rank			
				I	II	III	IV-VII
Below 26							
26-30							
31-35							
36-40							
41-45							
46-50							
51-55							
56-60							
61-65							
Above 65							
Totals							
Percentage of Total Staff							

RETENTION OF TEACHERS *

Total Teaching Experience		Teaching in District	
Number of Years	Number of Teachers in Category	Number of Years	Number of Teachers in Category
0-2		0-2	
3-5		3-5	
6-8		6-8	
9-11		9-11	
12-14		12-14	
15-17		15-17	
18-20		18-20	
21-23		21-23	
24-26		24-26	
27-29		27-29	
30-		30-	
Total		Total	

* An average (mean or median) should be calculated for each of the two groupings. The median, of course, is more simply determined and needs be only roughly precise for the purpose here.
Space is provided here for tallying.

TEACHER LOAD AND SPACE

(Supply numbers in each category and calculate ratios between respective column totals.)

Grades	Number Teachers	Number Available Classrooms		Number Pupils		Number of Different Class Groups or Preparations	
			per teacher		per teacher	total	per teacher
1							
2							
3							
4							
5							
6							
7							
8							
Total for Elementary Schools*							
9							
10							
11							
12							
Total for High School							

* If there is junior high school, group grades accordingly and calculate totals of each level.

"Fringe" Benefits

Kentucky law does not permit districts to contribute funds generally for teacher "welfare" programs, except under sick leave and retirement provisions of the law--and contributions to the retirement fund are made at the state level. On the other hand, the administration of the district can cooperate with and encourage teachers in setting up their own insurance programs or credit unions, usually through their professional organizations and with "group" advantages. Also, the board has some discretionary power in determining sick-leave, tenure, and leave-of-absence policies (beyond state minimums).

Questions which follow are meant to bring together a "picture" of the "fringe" benefits which attend employment in the district:

What are the sick-leave provisions? (The Kentucky state minimum provisions are 10 days per year, cumulative to 20 days.)

Is there a "credit union" for the staff? How is it operated?

Are there any voluntary group insurance plans for employees? If so, are they:

Life insurance?
Hospitalization?
Medical Care?
Other?

Are there any voluntary pension plans for staff (beyond that provided under State law)? If so what are they?

Does the administration support the plans in any way? If so, how?

Are there any tenure "rights" given staff beyond those provided under State law? If so, what are they?

Is there an established policy regarding leave-of-absence for staff (beyond provisions of state law)? If so, what are the general terms for granting such leaves?

Are any special privileges available to staff through the schools (economy purchasing, transportation, access to use of school facilities, rent free or low-rental housing, etc.)? If so, what are they?

Do businesses or others of the community generally grant certain advantages to staff (discounts, housing advantages, etc.) If so, how?

Is there any staff committee set up to study and evaluate the "fringe" benefits programs and make recommendations to staff and administration?

Consider:

"Fringe" benefits are generally regarded as the "extra edge" that a district attempts to provide in order to recruit and hold good staff. Usually they are of no importance unless basic salaries are high enough to assure a substantial living standard for teachers. Furthermore, administrative cooperation in support of such programs as health and life insurance (with payroll deduction, for example) is difficult if there is any considerable turnover in personnel. (Turnover, of course, is something "fringe" benefits are meant to check.)

Considering salary levels and turnover of staff, are more "fringe" benefit programs than now exist needed to attract and hold good teachers?

Would the staff welcome new programs or improvements in those already existing--considering costs?

Is there adequate machinery (committee or special study group) to attend to staff welfare problems, so that opportunities for improving fringe benefits will not be missed and so that those affected by decisions regarding any changes may have a voice in the decisions?

In-Service Education

A story is told of a teacher who boasted of seventeen years of teaching experience as a qualification for high status--a boast to which a critic, who must have known the teacher's performance, replied: "You don't have seventeen years of experience; you have one year repeated seventeen times."

In-service programs to help the staff improve itself have as an underlying principle: Improvement comes not by blind repetition but by experience with critical, purposeful attention to how performance may be improved. Such a principle has value, of course, largely as the individual teacher as a person applies it in his own teaching, as he is self-critical, open to new ideas and suggestions, and alert to opportunities to improve his work. It calls for dedication, persistent open-mindedness, sincere professional enthusiasm. There is no pat formula for giving these qualities to teachers, or to anyone else for that matter. There are, however, ways to create an atmosphere in a school district which supports and encourages these qualities. The evaluation to be made here deals largely, therefore, with elements essential to the creation of a stimulating, encouraging, supportive setting for staff self-improvement.

Following are some characteristics of good in-service education programs, with questions to be answered in determining whether or not they are being observed in the district:

I. Effective in-service teacher education must have adequate leadership. It is not left to chance. The initiation and implementation of programs to provide for such education is a primary responsibility of the board of education and the administration.
    A. Does the administration recognize need for in-service teacher education by providing for:
        ○ 1. Board of education policies which support and facilitate programs and activities?
        ○ 2. Delegation of authority and responsibility--where needed--so that specified personnel are assigned certain in-service education functions?
        ○ 3. Budgetary support for financ-

ing the programs to meet such needs as those for obtaining the services of resource persons, for paying travel allowances for staff to visit other schools and attend conferences, and for purchasing literature related to various topics under study in the school system.

○ 4. Calendar and scheduling arrangements to provide adequate time?

○ 5. Space for professional libraries, for collections of materials, for committees and work groups to meet?

B. Does the administrative staff plan for and carry on a comprehensive program for the in-service education of its own personnel as school leaders? For example, are there:

  ○ 1. Regularly scheduled meetings involving the total administrative and supervisory staff in which the needs of leadership are identified and attacked?

  ○ 2. Working groups established to attack various problems of leadership personnel?

  ○ 3. Efforts to relate continually the outcome of in-service teacher education programs to the long-range goals and purposes of the instructional programs?

II. Effective programs of in-service teacher education focus upon helping the individual teacher grow professionally. While the learning activities may involve groups of teachers in cooperative experiences, the purpose remains fixed upon aiding the individual teacher.

A. Do the staff feel individually responsible for their own self improvement--or is there a tendency to be "comfortably satisfied" and a reluctance to explore new possibilities?

B. Do they regard their individual roles as exclusive, isolated in the responsibilities those roles imply--or, do they see their roles as part of the coordinated effort of a total staff to serve the educational needs of youngsters?

C. Reflecting upon answers to the two questions above--how does the staff attack problems as they arise? Does each "sweat out" his own problems--or do they often seek counsel together, using whatever resources are available for dealing with them in the broad context of those concerned with the problems? Is there a frankness that problems exist, or a tendency to conceal them? Is there a recognition that a problem may be "used" to promote professional growth--or a feeling that problems are a sign of "defeat"?

D. Is there an informal openness in the relationship between teachers, principal, supervisors, (or others involved in the in-service program) which keeps the door open for teachers to get help with their problems?

III. A program of education for teachers in service should exemplify democracy in action. Because the growth of the individual is a prime goal in such a program, the purpose should be "consensus of the total group" involved rather than majority rule. Of course, the fact that the group should seek consensus does not imply that their operation should be liassez faire, nor that they should condone lethargic and desultory operation growing out of "wait until we have consensus" attitudes.

A. Do teachers have a real voice in determining the topics for study?

B. Is the responsibility for the performance of leadership roles clearly communicated? Are these roles then adequately performed?

C. Are teachers encouraged and assisted toward becoming leaders in a variety of ways: chairmen of committees, members of planning groups, members of policy-making groups, resource persons?

D. Does the status leadership provide numerous opportunities for all personnel to participate in the determination of purposes, policies, and procedures which affect the in-service education program?

E. Is there a general atmosphere of security which permeates the program so that all personnel feel free to voice their opinions and ideas?

IV. Effective in-service teacher education grows out of dealing with problems indigenous to the school where the teaching is done. The school is the laboratory where the staff identify their problems, interests, issues, and concerns, and develop their own processes for studying them. The school, then, is the basic unit for programming in in-service education.

A. Are faculty meetings scheduled regularly, with resource persons such as supervisors attending?

B. Does the school have an adequate professional library? Does this library receive current professional books, periodicals, research reports?

C. Are there numerous study groups at work on topics of interest, concern, or need?

D. Are there procedures for coordinating the programs of the various schools so that a district-wide program can be developed from common problems?

E. Have the staff devised ways and means of evaluating their efforts in in-service education? For example, are the outcomes of instruction being evaluated alongside the in-service program?

F. Are "in-service" days or periods spent mostly on subjects of only general relevance to identified problems--or are they "tailor-cut" to fit particular problems identified as indigenous to a school or schools of the district? Are special groupings of staff made to permit attacks upon problems common to small groups or individual schools? Are teachers with particular problems given time to concentrate upon them--i. e., to visit other schools, do library study, or confer with special resource people?

G. Put another way--is the in-service program a "remote," district-wide, general thing, "run" by the administration and/or supervisors, which to the extent it involves teachers, takes them out of their schools and away from their classroom problems--or, conversely, is it a district-wide effort to mobilize all available resources toward helping the teacher deal with his own school and classroom problems?

V. Effective in-service education makes use of all available resources, both from within and without the district.

A. In the in-service program, does the staff--administrative, supervisory and teaching--make full use of the experience and training of personnel resources wherever they may be in the district? Do principals and teachers, for instance, confer frequently with supervisors--who are in a position to know what different people and different schools within the district have done or are doing that might provide helpful experience and counsel? Are resources within the district used whenever possible--or must an "expert" be from somewhere else?

B. Do the schools of the district make good use of "outside" consultants, properly selecting them for particular roles and giving them clear statements of the purposes for which they are asked to serve?

C. Does the administration and staff support and cooperate with efforts toward professional improvement initiated through local, state and national professional organizations, such as local and state teacher associations, subject-matter "councils," principals' associations, and the like?

D. Does the district involve nearby colleges, the State Department of Education, and professional organizations--which have responsibility for support of in-service education and improvement of the profession?

Section III—School Administration

(1) Administer to the entire administrative staff some such questionnaire as the sample which follows. (There are advantages to using an outside consultant for this operation.) The purpose of this questionnaire should be to get a picture of the actual administrative operation for comparison to any theoretical pattern under which the staff may be "supposed" to operate.

These questionnaires should be confidential and need not be signed. Preferably they are distributed in meetings of manageable size groups (depending somewhat upon the size of the staff) and filled out on the spot and collected. There are advantages to having those with the same kinds of assignments grouped together, with the distributor free to explain any question and make sure all questions are clear. There should be no mysteries about the operation; yet, the staff must feel that confidences reported on the form will be strictly respected, or the study is likely to be superficial. Some individual or committee should abstract the information gathered, interpret it in summary form, and meet with each group to: (1) report what insights the results seem to reveal, (2) to check inconsistencies, and (3) to verify what the questionnaires appear to reveal.

(2) If it is not already available, an administrative chart should be drafted to represent the proper relationships among the various staff assignments in the whole district. This chart should be the theoretical (and hopefully, also, "practical") pattern of administrative operation and should represent the way the board and superintendent conceive of the operation. The chart should include lines drawn between positions to indicate authority, responsibility, or advisory functions, and should interpret comparative relationships among various levels of authority.

If such a chart is already available--as is often the case where board policies and regulations have been codified--it should, of course, be used.

(3) The administrative chart and the findings in the questionnaires should be compared, with similarities verified and inconsistencies explained. Eventually any needed adjustments should be made in the chart in light of the criteria which follow. These criteria and the bodies of information represented by both the chart and the questionnaire returns properly become the substance for dealing with the questions at the end of this section.

Purpose of Administration

It is axiomatic that the one overriding, top-priority purpose of all educational administration is to make teaching more effective. That is, educational administration is a means to the end of education. Not the end, but how educational administration may best serve that end is the matter for consideration here.

Administrators, however, do not actually teach boys and girls. They delegate responsibilities and direct others to the end that boys and girls are taught. For its part in the undertaking, school administration, as generally conceived, has the functions of:

1. Planning and organizing the undertaking.
2. Supervising and coordinating efforts toward the end of efficient performance.
3. Appraising the efforts and results of the undertaking.

Following is an attempt to define the most essential characteristics of that school administrative organization within which a staff may operate most effectively to perform its responsibilities:

A. Good school administrative organization provides leadership. Good school administrative staff are not content simply to await directions from a board of education or the superiors to whom they are responsible. Rather, they work in an atmosphere of both freedom and responsibility for initiative, creative planning, and even experimentation.

(Note: This section, we feel, can best be used as a guide for a somewhat restricted self-study by the administrative staff and the board--with perhaps some carefully selected representation from the teaching staff and citizenry. Outside consultant service in the study may also be valuable, in providing a leaven of detachment and objectivity.

A problem in this particular type of evaluation is the avoidance of personal application of the information. Any study authorized by the administration and welcomed by the staff should be made on the assumption that they are "courageous" enough to face their own deficiencies honestly--a fact which credits them very considerably, we suggest. Any tendency to exploit the situation either to make the study an "investigation"--or worse still, a "smear"--becomes a perversion of the purposes of the study.

In a sense, the above statement is true of any study of the schools. This section, more than others, however--because it deals more than most with judgments and opinions on delicate matters--must be approached with forthrightness, a critical but constructive honesty, and an emphasis upon principle rather than personalities.)

This means that they must have considerable latitude for use of their own judgments in carrying out their responsibilities. They are expected to take policies stated in general terms and interpret and apply them with resourcefulness and imagination.

This is to say, a board of education has a right to expect its superintendent to execute a generally outlined program or statement of policies without the necessity of its blueprinting in detail how he is to do so. Neither should the superintendent expect to have to pattern in detail how his subordinates should carry out the assignments delegated to them, or "kibitz" to see that they do so in any explicitly specified manner.

The analogy has been drawn aptly between the school administration and the architect on one hand the school board and the architect's client on the other.

The client wants a creative, competent, aggressively initiating person to design his house and direct its construction. He does not himself know how or want to draw the plans or do the supervisory inspections to see that the job is properly done--though he does want the architect to produce the kind of house he--not the architect--wants. The wise client gives his architect considerable "free rein," accepts much of his advice on faith--or gets a new architect when he finds he cannot do so. He encourages the architect to use his knowledge and creative ability under the considerable freedom allowed under that faith.

A school board, representing the community, wants a school to serve the needs of the youth of the community. It expects the superintendent and his staff to be able to produce and operate that school. It expects to be concerned only generally with how--and its overconcern with details may quickly discourage creative resourcefulness and postpone development of a personal sense of responsibility for the job among the administrative staff.

Furthermore, a board has a right to leadership from its employees in developing its (the board's) ideas about the "house." A homebuilder often wants the competent architect to tell him the kind of house he wants or should want--to tell him what will satisfy his (the client's) purposes in building a house. So the board may--and has a right to--expect the paid staff of its schools to tell it what kind of schools the community should have.

The same principle applies in relationships between levels of the administrative staff. The superintendent must entrust to his immediate subordinates matters for which he will be held responsible--even as the board is ultimately responsible for his performance. Moreover, he has a right to expect them to carry out their assignments without involving him with unnecessary complexities and details. He has a right to expect leadership from them: suggestions and guidance regarding how he can better administer, adjust, and coordinate the school program, or even modify his conception of what that school program should be. Needless to day, this chain of trust and expectation must extend through all levels, if the leadership resources of the staff are to get full exploitation.

B. But, good school administrative organization provides a framework within which leadership may be held accountable. Good administration does not, carte blanche, license its personnel simply to meander about being "creative" and exerting "leadership" without direction or limit. Accordingly, a good administrative organization provides:

1. Clearly defined areas of assignment in terms both of expectations and limits of authority.

2. Clearly defined channels for responsible accounting to superiors and to the board.

3. A regular system of reporting and accounting, with sufficient permanent records open to all, including the citizenry to whom the system is ultimately responsible.

4. Policies aimed at fostering an atmosphere of mutual respect among the staff and board for each other's responsibilities so that each respects the assignments of his colleagues, superiors, and subordinates, and their respective authorities in them.

It is important that respect for each other's responsibilities operate both upward and downward in the heirarchy of administrative organization. Accountability--as well as general morale--suffers when subordinates skip levels of responsibility, "short-circuiting" their immediate superiors to report to "higher ups." Just as corrupting is the "higher up" who skips his immediate subordinate to deal directly with sub-subordinates without respect for their immediate superior's responsibilities.

C. Good school administrative organization provides for a coupling of responsibility with authority.

Each employee should have authority necessary for doing whatever task he is assigned. If he must depend upon someone else for authority to perform or direct others to perform his task, he cannot rightly be held accountable. If an assistant superintendent, for example, is given responsibility for a particular program, he should also be given commensurate authority so that he can proceed with the program. Supervisors provide instructional services to the schools. In such instances, however, they are under the direction of the director of instructional services and their authority is commensurate with the responsibility they have to provide the service. There are, of course, service divisions within a school administrative organization which procure, train, assign and reward personnel who serve other divisions. Among these, for example, are transportation, custodial, maintenance, and cafeteria services. Their personnel are responsible to the heads of their respective divisions, by whom they are given authority necessary to perform their responsibilities.

D. *Good school administrative organization provides a framework for operation through openly stated policies* which give staff the perspective for making decisions, specify agreed-upon procedures for dealing with routine and readily classified problems, provide guidelines for general operation, and reduce the necessity for arbitrary, on-the-spot judgments. These policies may represent accumulations of "common law" precedents based on past decisions, or may be pronouncements of policy framed to establish a pattern for the future. In any case, the policies should be codified, but kept open to amendments as situations demand additions and changes. The code of policies should represent no sacred, immutable document, but should be respected as the *best* at the moment, right until changed by careful review through approved procedure.

E. *Good school administrative organization eschews duplication of function.* The problem in this area usually accompanies vagueness in definition of areas of responsibility, with consequent ambiguity about who has a given responsibility. Accordingly,

F. *Good school administrative organization establishes clear definitions of areas of responsibility* and the channels by which those areas relate themselves to the entire administrative organization. (This item overlaps items A and B somewhat.) In a growing organization, particularly, it is difficult to keep these definition, especially definitions of relationships among units, up to date.

It is perhaps impossible to define job assignments so explicitly that occasionally "buck passing" will not occur, and at the same time provide the desirable latitude required for creative leadership. Clarification of assignments is obviously, however, of great importance; so is structuring of the organizational pattern. A general rule is: No employee should be responsible to more than one person.

G. *Good school administrative organization divides and sub-divides areas of responsibility so that each is of manageable proportions* in terms of the competence of available personnel. The theory underlying this principle is that when the complexities of a given unit of responsibility grow beyond the reasonable performance expectations of one person, the unit should be subdivided, without alteration of the relationships of the unit to the rest of the organization--i.e., the person in charge is given an assistant or assistants. As complexities increase indefinitely, of course, at some points more subdivisions must be made. This substructuring extends channels of responsibility "downward," but need not alter the basic structure of the administrative pattern.

H. *Good school administrative organization provides for all essential functions of the educational task in its design.* That is, there are no "left over" tasks not assigned to anyone (or assigned to *everyone*), or needed operations ignored.

I. *Good school administrative organization provides adequate communication among the staff* by formal or informal means, depending upon the character and need of the moment. (A difficulty often is that formal announcements or staff meetings become part of the "din of bombardment" so that the effectiveness of communications is lost. No prescription is available for just the "right" amount and kind of communication.)

J. *Good school administrative organization is aimed at exploiting to the fullest possible extent personnel resources of the staff by providing for use of the method of common counsel among the staff in dealing with problems.* (This principle has a direct relationship to the problem of communication. If the staff are consulted, they are also informed.) A sequitur to this principle is:

K. *Good school administrative organization provides for involvement of those who are to be affected by a decision in the decision process itself.* This principle does not mean that "votes" necessarily or even ever determine the decision. It does mean that the administration seeks the honest counsel of those who have a stake in the matter at issue and weighs that counsel before the decision is made, presumably evaluating the advice in terms of soundness of reason and evidence, so that, ideally, each has his voice in proportion to the validity of his arguments. Decisions clearly dictated by previously agreed-upon policies do not, of course, require counsel. And, if the policy does not clearly imply a decision, the issue for counsel becomes clarification, not what the decision should be once the policy is clarified.

L. Good school administrative organization respects the responsibility each has for delivering his assignment. This principle does not abrogate the one (Item K) just stated. Further, it is corollary to Item B. It means, for instance, that regardless of any advice a superintendent or division or department director may get from his staff the decisions he makes in carrying out his assignment are his. He may do well to value their advice greatly; he may feel that they know better than he--as may well be the case in many matters; but when the decision is made it is his, not theirs. This is not to suggest that it is wrong for an administrator to accept the advice of his staff and make a decision against his own judgment. To do so suggests a very reasonable humility at times. On the other hand, his respect for his staff's advice should represent no surrender of his responsibility to make and be responsible for the decision. This principle should be clearly understood on both sides, so that the staff has no misapprehension on the one hand that its head is subject to their popular choices nor the head the notion that his staff can be blamed for his decisions.

This principle extends, of course, to board-superintendent relationships. The board may well, as a matter of policy, require that before the superintendent presents a recommendation to them he obtain the best counsel he can find among his staff or others involved in the decision at issue. (In many instances, advice should be sought from those outside the staff, perhaps public groups who are involved in whatever is at issue.) The final decision, of course, becomes the board's responsibility.

Distinctions important in applying this principle are in the differences between honestly getting help from all those who have a stake in a decision and:

1. Abrogating responsibility for the decision in favor of whatever is most "popular," or
2. Using the procedure as "window-dressing"; i.e., going through the motions of seeking counsel with no intent to let the advice affect the decision.

M. Good school administrative organization fosters among the staff a unifying dedication to the common effort. Responsibility, as pointed out, is properly focused within a defined area, the specified assignment of the staff member. There should, however, be for each staff member a peripheral or marginal responsibility to the whole, a concern for the total of which the focal area is a part. This means constructively critical concern for the total job, willingness or even compulsion to accept responsibilities to deal with unclassified problems sure to arise, and cooperation when "the ox is in the ditch." It is an accompaniment of a general sense of real membership on "the team" and a sense of basic security that can endure scolders and critics. It exists only where there is some freedom to make mistakes, so long as the mistakes are part of an honest effort to serve the common cause. (One is not encouraged to take peripheral responsibilities if, for instance, he helps pull the "ox out of the ditch" only to be reprimanded for violation of another's prerogatives.)

N. Good school organization provides for recognition and rewarding of staff on the basis of merit as determined by openly stated, and preferably objective, standards. Ideally the salary schedule and stated promotional policies provide a framework within which the staff may work without their concern for their own status and security competing with their concern for the program they are to serve. Clarity and justice are to be sought, therefore, in the standards set for employment, compensation, and promotion or dismissal. Appraisal of staff performance should take place at regular intervals, at least once each year and more often during the employee's probationary period, so that staff may generally know "where they stand."

O. Good school administrative organization simplifies as much as possible all operations, including particularly record keeping, accounting, reporting and communicating. It does so to keep personnel requirements at a minimum (with over-all cost the consideration) and to free staff from routine that takes time from creative work. In this connection, it provides a balance in specialized personnel to handle clerical routine, and/or uses machines for efficient impersonal handling of detailed data. Recent developments in machines for accounting, recording, classifying, and computing data are a challenge to the school administration which, for obvious reasons, may be reluctant to replace present staff with machines and/or new, specially trained staff, even though efficiency so requires.

P. Good administrative organization is dependent for its effective operation upon sound functioning of the local board of education. A local board of education has three major responsibilities:

1. The development of clear-cut general policies for the school system.
2. The over-all appraisal of the educational enterprise, and
3. The continuous planning of program advancement.

Within these three fundamental activities, of course, a board discharges the legal responsibilities spelled out in laws, such as approving the appointment of personnel, adopting a budget, and following and enforcing rules and regulations of the state board of education.

Clearly stated, consistent policies give direction not only for the board but for the professional personnel and for the public as well. Any particular decision or action can be viewed against policies, either as contributing to them or minimizing their fulfillment. With clear policies generally understood, a board and the professional personnel can much more easily appraise the extent to which the educational enterprise is effective. Policies thus constitute a basis for evaluation. Evaluation can then be used for planning needed improvement or advancement in the educational program of the system. Appraisal may also indicate the desirability of policy revision. This cyclical functioning enhances vitality in a board, the professional staff organization, and the community at large.

The effective performance of the three basic functions is dependent upon several key guides. Among those guides, one is that a board operate as a unit in the best interest of the entire school system. A board member, in spite of his place of residence or electoral following, represents the entire system. Except when in official session of the board, he is not actually a member free to make commitments, decisions, or treaties. Listening and questioning, yes; explaining and discussing policy, yes; making covenants, no. And once a policy or decision has been made by a board, it is incumbent upon each individual member, whether he is in total agreement or not, to uphold the action until it has had a fair trial and is then subject to revision. To do otherwise is to segment and factionalize, with all that ensues in cleavages throughout the community and the professional staff organization.

A second guide is that the board recognize its appointed superintendent as its executive officer upon whom the responsibility rests for the execution of policy. Only so can accountability be fixed. When a board or any individual members attempt to handle administrative problems, confusion and frustration occur in the organization of the school system and accountability of the executive officer is dissipated, as well as the accountability of other administrative staff members in the organization. Moreover, the policy framework within which the superintendent is to operate must be viewed with consistency and given stability through insistence upon an orderly procedure when change is made. No matter how able an executive officer may be as an administrative leader, he will be less able when policies to guide him are vague or ambiguous or ignored or interpreted diversely by board members. In these times an executive officer, as well as a board, is confronted with a myriad of "supermarket" demands from individuals and groups within the community and within the professional ranks. And one position in the organization, the board's executive officer, must be focal for the sifting and screening of a mounting multiplicity of "wants," some often conflicting, some peripheral or tangential to the main purposes of the system.

A third guide to the effective performance of a board's basic functions is that the board make continuous efforts to involve the public appropriately in major educational matters and to keep the people generally informed about policies, needs, conditions, and plans for the school system. This does not mean, however, that a popular referendum is held on whether or not number sets should be taught at one certain grade level or another. Such a decision is a professional matter, and there are more fundamental decisions with which a board must be concerned--the means for raising the expectancies and aspirations and educational levels of the public, for example. When changes in policies seem plausible, the public must be informed adequately of the need for a change and of the effect that a contemplated change may have upon the public at large or upon sections of it. Board policies should not be formulated in a passive trailing of temporary public whims but in a vigorous vanguarding of social needs to be met by education.

Thus, in any examination of administrative organization the functioning of a local board is basic. Good administration depends upon how well a board performs its essential functions.

Consider:

(1) Principles A and B are, in a sense, opposed to each other. Together they imply that the administrative staff are to be encouraged to exercise freedom, imagination, creativity and initiative (A)--but, within the limits of, and for the purpose of, serving, their particular responsibilities (B).

Is the administrative staff of the district free to try out the new? Are some mistakes assumed to be inevitable? Or, must staff be fearful that any mistake will "expose" them as fallible?

Is a staff member "trusted" to carry his assignments without interference or over-detailed directions and "KIBITZING" from his superior? On the other hand, does the superior define assignments clearly and make sure each staff member has necessary authority and help?

Do staff hold themselves and each other accountable within the areas of their respective assignments? Or, is "buck passing" common and responsibility never exactly fixed?

Do staff members respect the responsibilities of each other? Does anyone ever "go around" his superior to deal with a "higher up" on a matter which concerns the superior? Do superiors ever "short circuit" their immediate subordinates by "going around" them to deal with sub-subordinates? Does a higher-level staff member ever pre-empt authority over those who are actually not responsible to him?

Are there openly stated--preferably published--policies which clarify assignments and areas of responsibility?

(2) (Principle C) Does each employee have authority commensurate with his responsibility? If he has an assignment to perform, does he have the power to perform it or get others to do so? Or, is it necessary for him to check continually with his superior to make sure it is "all right" for him to go ahead?

(3) (Principles D, F.) Is there a practical, clear, widely understood framework of operation (preferably based on published statements of policy and regulations which support those policies) which provides a basis for consistent, stable, forthright administration of the district? Is any existing administrative chart or statement of job definitions actually operating to clarify responsibilities of staff? When changes take place, is everyone informed? Are the reasons for policies, and for any changes from time to time, widely understood?

(4) (Principle E.) Are similar, over-lapping operations performed by two or more different people or divisions of the school? If so, why? Is it because assignments of responsibility are ambiguous? Or is the operation so essential that one is properly checking the other?

(5) (Principle G.) Are some employees "overloaded" while others are "underloaded"? Should some tasks be subdivided? Is there ever confusion because work of an overloaded employee or division must be reassigned to another? Are responsibilities and authority kept clear when this is done?

(6) (Principle H.) Are there some educational services the district should be performing which it does not? Why? Because the tasks were not clearly assigned? Forgotten? Or relegated to lower priority for the time being?*

(7) (Principle I.) It has been observed that when morale in a school is good, people communicate more informally, and less through written or formal channels? A balance of both, of course, is desirable.

Is communication a problem in the district? Confusion? Inconsistency? Are announcements so frequent as to confuse? Do important matters get the emphasis they deserve--or are they cluttered with the trivia?

Is there a feeling that everything is "out in the open"--or that major decisions and events take place without being generally known?

(8) (Principles J, K, L.) Are staff who are to be affected by a decision involved in the decision-making process? Though they may disagree with the decision--do they have an understanding of why the decision was made as it was?

Do staff recognize their own responsibilities for giving the administration their best judgment and advice regarding a pending decision--on the assumption, however, that the responsibility for the decision itself is not theirs and that ultimately it may not represent their opinions? Does the administration honestly seek counsel from the staff in arriving at a decision, but nevertheless accept responsibility (and not "pass the buck" to the staff) for the decision after it is made?**

(9) (Principles M, N.) Is there a helpful willingness among the staff when emergencies or unexpected circumstances arise? Or, does each tend to isolate himself within his own responsibilities, feel what happens to the rest of the program is none of his "business," and reject responsibility for the "common welfare"? If so, why? Is "dedication to the common task" ever interpreted as "interference with others' responsibilities"? Are "helpfulness" and "presumptiousness" confused?

Is there a sense of unity among the staff? If so, what is its character? Is it based on a feeling that merit and service are respected? Is it a common seeking for security and advantage? Or a common concern for the purposes of the school?

What are desirable motives for building sound staff morale?

(10) (Principle O.) Are the advantages of specialization, in the use of specially trained personnel or machines, recognized in the operation of the program? Are teachers taken up with "chore" work (which might be done economically by special help or machines) at the expense of time for teaching or dealing with individual problems of students?*** Has any study been made of the amounts of time used for handling grades,

text books, attendance records, and activity accounts, or for scoring tests which could be machine processed?

(11) (Principle P.) Has the board of education of the district recognized its responsibilities (beyond those prescribed by law) for:

> Establishing clear-cut, openly stated policies as a frame work for the district's operation?
>
> Appraising the over-all program, so that the board itself, the staff and the public may intelligently assess the values (and weaknesses) of the operation?
>
> Planning the program, so that decisions involving future commitments may be wisely made?

Does the board leave the running of the school to those to whom it has delegated responsibility and authority? Does it ever "short-circuit" its own agents, or "interfere"? If so, why? Because policies governing matters in point had not been previously established? Because the board did not recognize that their delegation should be conclusive as a matter of policy and contract (principles A, B, C)? Other?

Does the staff recognize that ultimately the board _must_ be responsible for _their_ performance of the tasks to which _they_ are assigned? Do they respect the board's responsibilities--as they would want the board to respect _theirs_?

Do members of the staff ever take matters directly to members of the board, "short-circuiting" responsibilities of other staff members? Is board "business" ever conducted outside legally-called board meetings? If so, why? Are binding agreements or decisions made? Do members of the board as individuals ever commit the administration on any matter of school business?

Do board members encourage or discourage citizen's approaching them personally on school matters? Do they refer citizen's complaints and suggestions to the superintendent--or present them to the board without regard to the superintendent?

Are statements of board policy available to all, including the public, so that they may be widely understood?

Does the board concern itself with the instructional program--as well as with the fiscal and physical aspects of the program? Does it require staff to keep it informed in a broad sense regarding such things as curriculum changes, grade and test results, special programs, etc?

Do the staff and/or the public have reason to feel that the board is continually evaluating the school program toward improving it? All facets of the program?

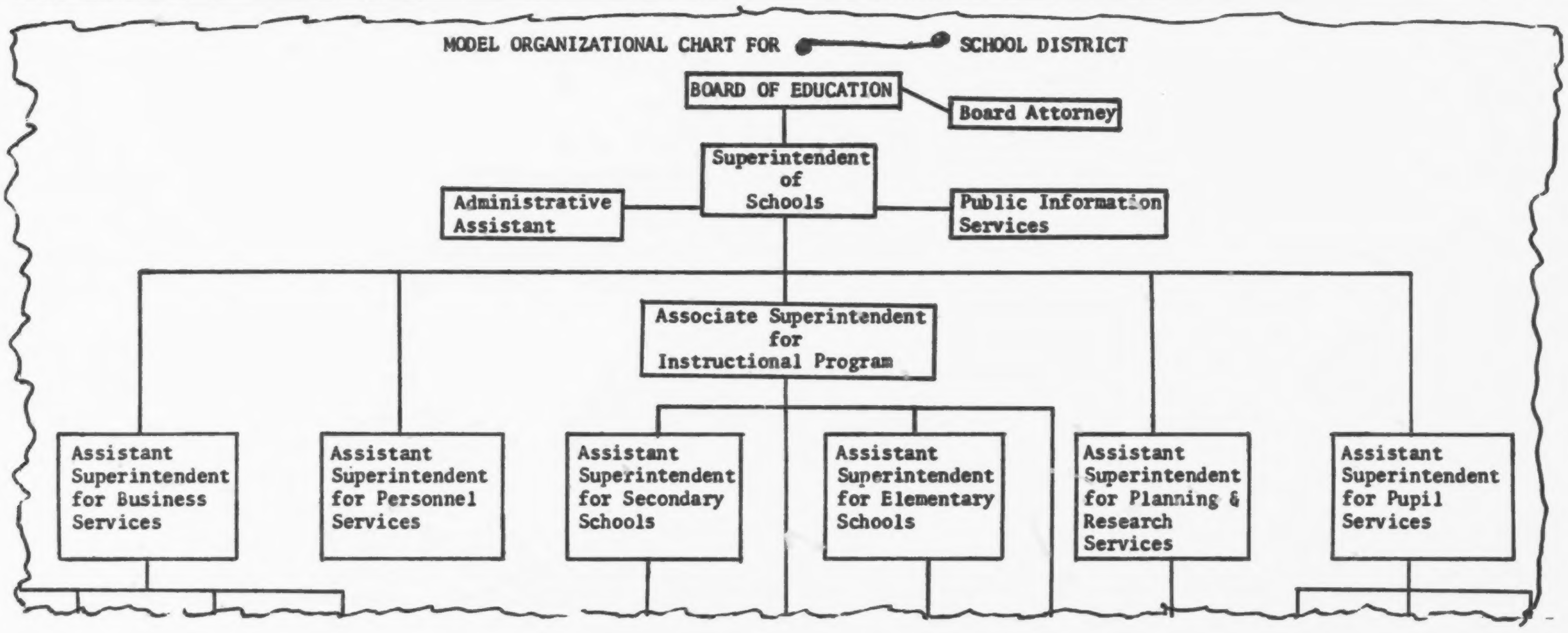
Has the district ever had an organized appraisal and planning program, by self-study on the part of staff, by citizens' committee, or by an outside survey team? Or other? Have the plans lead to adjustments in the program?

---

* One of the most common omissions is educational planning.

** There are, of course, some matters properly the responsibility of the staff. In many colleges, for example, only the faculty can authorize exceptions to an approved program in graduating a student, and the curriculum of a school may well be regarded as the professional responsibility of the teaching staff. Generally, it is held, the grades a teacher gives his students are his decision alone.

*** Inevitably, larger districts can use special clerical helpers and machines for recording and accounting more economically than can small ones. Also, as complexities of reporting and accounting usually increase with the size of a district, there is a tendency for them to take more and more time from teaching. How thorough the study should be on this point depends, therefore, somewhat upon the enrollment, as well as the geography, of the district.


MODEL ORGANIZATIONAL CHART FOR ——— SCHOOL DISTRICT
BOARD OF EDUCATION
Board Attorney
Superintendent of Schools
Administrative Assistant
Public Information Services
Associate Superintendent for Instructional Program
Assistant Superintendent for Business Services
Assistant Superintendent for Personnel Services
Assistant Superintendent for Secondary Schools
Assistant Superintendent for Elementary Schools
Assistant Superintendent for Planning & Research Services
Assistant Superintendent for Pupil Services

INDIVIDUALIZED INFORMATION
FROM
ADMINISTRATIVE PERSONNEL

____
Name of Position

I. List your major responsibilities (List both the area of responsibility and your function--i.e. planning, organizing, supervising, initiating, etc.):

II. List (as nearly as possible in order) the responsibilities which take most of your time.

III. Indicate amount of authority you have for each responsibility (Indicate completeness, limits, etc.):

IV. With whom, if anyone, would you check on the following problems?

a) an unsatisfactory subordinate:
Instructional______________________________

Non-instructional______________________________

b) a needed piece of equipment:______________________________

c) a needed additional employee:
Instructional______________________________

Non-instructional ______________________________

d) a needed new procedure:
Instructional______________________________

Non-instructional______________________________

e) a change in the curriculum:______________________________

f) other typical problems:

Problem	Person

V. To whom are you directly responsible in these areas?

a) curriculum____

b) finance____

c) staff personnel____________________________________

d) student personnel__________________________________

e) physical facilities__________________________________

f) transportation____________________________________

VI. Where or from whom do you get most of your information about the school system?

VII. Who gives you the most help in the successful performance of your job, and what kind of help?

VIII. What factors present in the system prevent or retard the successful performance of your job?

IX. Describe a recent decision which was made in the system with which you agree. (What was the decision, how was the decision made, who participated in making the decision, who was most influential in making the decision, how did you find out about the decision, why did you agree, and with whom have you communicated about your agreement?)

X. Describe a recent decision which was made in the system with which you disagree. (What was the decision, how was the decision made, who participated in making the decision, who was most influential in making the decision, how did you find out about the decision, why did you disagree, and with whom have you communicated about your disagreement?)

Section IV—School Finance

The primary purpose of a school system is to provide the best possible environment for teaching and student learning. The degree to which this purpose can be achieved depends in great part upon the economic efficiency of the system--how revenue is obtained and spent. Money does not guarantee a good school program, but a good program is impossible without it.

Revenue for the support of public elementary and secondary schools in Kentucky is obtained from three sources: local, state, and federal.

In 1960-61 the percentage of the total cost from each of these three sources was approximately:

41% from local

55% from state

4% from federal

The ratio of state to local support has been increasing each year since the Minimum Foundation Program law went into effect in 1956.

Revenue from State sources is largely distributed to the local school districts on the basis of the provisions of the Foundation Program. It is estimated that for the year 1963-64, the total cost of the Foundation Program in Kentucky will be $157, 873, 990 of which at least $49, 891, 042 must be paid by the local school districts as their share. The total includes allotments for instructional salaries, other current expenses, capital outlay, and pupil transportation.

The Foundation Program is meant to guarantee a basic minimum support for education in every district of the state. The general notion of the plan is that a minimum salary (determined by the amount of college preparation) is guaranteed for each teacher and set amounts earmarked for other current expenses, capital outlay, and pupil transportation. Transportation allotments depend on the number of pupils transported more than one mile and a density-of-population index calculated for the district, but other allotments are assigned as "classroom units." "Basic" classroom units are represented by a teacher for each 27 pupils in average daily attendance. These units may be compounded, however, to provide for additional units for administrative, supervisory, and special instructional staff. For instance, vocational and special education staff may be included in calculating units, so long as programs for their work are approved by the Department of Education. These are added to the "basic" units and, combined with the "basic" units, become the basis for adding units for certain administrative and instructional assistance staff; i.e., for every eight, an administrative unit may be claimed (making it possible for an eight-room school to have a principal). One supervisor can represent a unit for every 50 to 100 classroom units. A unit for director of pupil personnel is allowed for every 36 to 166 classroom units.

In general terms, a unit consists of:

The minimum salary for the position. (In 1960-61, the average Kentucky teachers' salary was $4,102.)

Other current expenses - $900

Capital Outlay - $600

The amount represented by a unit varies, of course, according to the salary minimum of the position. Generally a unit represents $5, 600 to $6, 000--but the allotment must be spent for the purposes indicated, though "current expense" and "capital outlay" are rather general terms.

When all of the units, plus the transportation allotment, are added up for the district, the total becomes the cost of the Foundation Program for the year. (Actually, calculation is based on the previous year's figures, with a minor provisional arrangement for growth or loss of enrollment.) The district must pay its share, which is the amount a rate of $1.10 per $100 of assessed value would raise in the district if its assessment ratio were average for the state. (This calculation is made by the State Department of Revenue.) The state pays what is required above that amount.

The difference between what the district must pay as its share of the Foundation cost and what its prevailing tax rate will raise is its "leeway" money; that is, money not earmarked and available for whatever purposes the board may elect. It is from such funds that teachers salaries may go above the state minimums, that extra teaching aids, library materials, additional building, etc., may be provided to "enrich" the program. On the average, in a district with $1. 50 tax rate, "leeway" money represents the amount that is raised by the 40¢ difference between the $1.10 and $1. 50 tax rate. If, however, the district's assessment ratio is below the state average, some of this margin will have to be used to satisfy the district's share of the Foundation cost--or, if above, the "leeway" is even greater. The Foundation Program, therefore, provides a minimum, but not a maximum for education in the state.

Note that the Foundation Program requires all districts to make an equal effort on the basis of actual taxable wealth (as calculated under the Foundation formula) but distributes state funds in proportionally greater amounts to districts of less taxable wealth.

Although in this country education is considered a state function, most states have delegated large powers for the management and control of the public schools to the local communities or districts. The state legislature defines the scope of the powers of the officers of the local districts, what property can and cannot be taxed for local school purposes, the maximum and minimum rates of taxation, and the purposes for which school money can be spent.

Within such limits provided by law the local board of education in Kentucky has the management and control of the schools of its district. This means that although much of the receiving and spending done by the local board is patterned by state law, and particularly by the Foundation Program with its specified allotments, it is the fiscal agency in which primary responsibility for financing the schools is lodged.

Local School Revenues

The primary source of local school revenues is from property taxation. Some revenue is received from poll taxes, and from such sources as rent, interest on investments, deposits, tuition, and the like. For the purpose of taxation in Kentucky, property has been classified as General, Franchise, Bank Shares, and Whiskey.

The General property taxes and Bank Shares are based on the assessed valuations as reported by the local assessor's office. Franchise and Whiskey taxes are based on assessed valuation, regardless of what the local tax rate may be. Other property--General, Franchise, and Whiskey --may be taxed only at the maximum rate of $1.50 on each $100 of assessed valuation unless the voters of the districts by referendum vote a higher rate. By 1961, more than two-thirds the independent districts and one-fourth the county districts of the state had approved tax rates above this minimum, two independent districts having a rate of $3.00.

There is great variation in the distribution of wealth among the school districts of Kentucky and there is great variation in the ratio of assessed value to full value of property assessment. The Kentucky constitution, as does the constitution of most states, calls for property to be assessed at 100 percent of its value (that is, its market price.) In practice, however, this stipulation is ignored and property is assessed at far less than its market value. The state average for all school districts in 1961 was 32.1 percent of the full value of property assessed.* The range in ratio was from 21.8 percent to 43.4 percent. The "true" tax rate, as if assessments were 100 percent of actual value, ranged from .36 cents in the lowest district to $1.02 in the highest.** It should be noted that if a school district with a 30 percent assessment ratio and a $1.50 tax rate should persuade the county assessor to raise the ratio to 40 percent, the effect would be comparable to increasing the tax rate by 50 cents.

Since ability must be determined in relation to need, and since population, property values, state appropriations, and receipts from property taxes change from year to year, it is helpful to have information for a period of years to show trends. It is also helpful to secure comparable information from other districts within the state, and for the state and nation as a whole.

The tables which follow were designed for this purpose.

What is the total assessed valuation for school tax purposes of property within the district? What is the valuation per pupil in average daily attendance? The ratio of assessed value to real value? What is the trend of assessed valuation in the district over the past ten years? How does the taxable wealth of the district per pupil in average daily attendance compare with that of other districts in the state?***

Consider:

Looking over the information collected for the tables which follow, consider:

(1) (Table 1) How does the district compare to the state as a whole and to neighboring districts in assessment per school child? In ratio of assessed to full value of property? In legal tax rate--which is some index of community willingness to support schools? In "true" tax rate--which is probably the best available index of effort in comparison to other districts?

(2) (Table 2) How does the proportion of school support from local sources compare to that of the state as a whole and of neighboring districts? What trend is indicated? Do the figures imply that, comparatively speaking, the district is paying its share? Has there been any tendency for local support to "sag" as state-federal funds have been increased? What do increases in state-federal contributions mean in the long run to the community's sense of responsibility for its own schools?

(3) How is the assessment ratio (Table 1)

---

* Information, State Department of Revenue Frankfort, Kentucky.

** *Where Does Your Community Stand in Supporting Its Schools, 1963?* Bureau of School Service, University of Kentucky, Lexington, Kentucky.

*** Data for comparisons among districts usable with several of the tables to follow are compiled from time to time by the Bureau of School Service, University of Kentucky; i.e., *Where Does Your Community Stand in Supporting Its Schools?* This publication is available on request.

related to local revenue? Are variations in local revenue related to the ratio, or to increases or losses of wealth in the district?

(4) (Tables 3, 4) The amounts from state-federal sources, plus the local district's Foundation obligation, represent funds "earmarked" for rather particular purposes--though, as explained, there is some latitude in the way some ("other current expense" and "capital outlay" funds, for example) may be used. Is this latitude, and that provided by "leeway" funds, great enough to permit the district to adapt its program to immediate needs? If not, how can the needed latitude be obtained?

(5) (Tables 4, 5) Is the trend in income from local sources a stable one, or do some tax sources vary so much that budgeting is difficult (whiskey revenue, for example)?

Has the district maintained, in general, steady, continuous support--or have Foundation funds been permitted to displace (rather than add to) local funds since 1956? Has the assessment ratio been stable? Are increases or drops in local income attributable to variations in the assessment ratio, or to variations in the actual wealth of the district? Has the ratio tended to drop as property values increased? Or contrariwise--as must be the case if government services are to be maintained against the spiral effects of any local depression?

(6) (Table 6) What is the trend in teacher salaries in the district--compared to neighboring districts, the state, and the nation? Have the districts salaries kept pace? Has the total amount spent for salaries kept pace? Has the district had to hire more or fewer teachers--affecting its "load" for teachers salaries? Are the salaries "competitive" so that the district can recruit good teachers on an equal basis with other districts?

(7) (Tables 7, 8) Are the proportions of the budget spent in different categories "in balance" by comparison to state and national averages? Do they represent proportionally the emphasis desirable in a good school program?

(Values are necessarily involved in judgment here. Generally the higher the proportion spent for "instruction" the more "efficient" the system is judged to be. It should be considered, however, that good teachers without good facilities are like carpenters without good tools--so expenses for plant and other current expenses are important. If administration costs are low, it may be that the instructional staff is so overloaded with details that it has little time to teach. If maintenance costs are low, instruction may face the handicaps of shabby housekeeping, and neglect of plant may mean early deteriation of buildings. A low capital outlay figure may mean that the district is falling behind in classroom construction, so that an "expensive day of reckoning" lies ahead.)

(8) (Tables 9, 10) Current expense per child is generally regarded as one of the best measures of a school program--assuming, of course, that the funds are wisely used. What are the trends in percapita-per-pupil income and expenses? How do figures compare to those of neighboring districts, the state and nation? (Tables 9 and 10 are useful if projections are to be made for planning purposes.)

(9) (Table 11) If the district does find it necessary to borrow for other-than-capital-investment purposes, why? Are interest costs a significant part of district expense? Could any arrangements be made for accumulation of a reserve to prevent or reduce necessities for such borrowing? Do citizens generally realize that such borrowing is necessary?

(10) Does the information gathered in the preceding tables imply a need for a more definitive study comparing schools or groups of schools within the district, in order to determine points where funds might be used more efficiently?

Fairness and Efficiency in Use of Funds

It is impossible, of course, to equalize expenditure per child or per classroom within the district--and ultimately undesirable. The pupil who lives at the far end of a bus route is sure to require more expense for transportation than the one who lives close to the school. All things equal, the small school almost inevitably--up to a certain point--has a higher percapita-pupil cost than a large one, unless investments in library, laboratory, auditorium, gymnasiam and other such facilities are comparatively limited for the small school--although the large school, which can usually afford better facilities, tends to attract better-prepared teachers, whose salaries tend to be higher. Concern for every child calls for reasonable effort to equalize opportunities throughout the district, though doing so is sure to make costs uneven--and the goal can never be fully accomplished.

On the other hand, logistics of distribution of available resources--which are nearly always limited--are important; the good administration, like the good general, deploys the resources where they will do the most good. Some comparative studies among schools of the districts may give clues to places where there are inequalities in service as well as opportunities for savings. From the viewpoint of those responsible for getting the most out of available funds (and, more particularly, local funds), efficiency requires:

(1) Grouping of students, so that teaching loads are balanced but students clustered to satisfy the Foundation requirement of 27 pupils in average daily attendance per teacher. (Also, full use of available Foundation Program units.)

(2) Grouping of students so that expensive facilities (library, laboratory, gymnasium, etc.) are used by as many pupils as possible.

(3) Efficient patterning of bus routes to reduce duplication--with consideration, of course, for balance in loads and in length of routes, and for minimizing waiting time for students.

(4) Economy in plant construction so that, considering the long range, maintenance, depreciation, and insurance costs are low. Also, continuous preventive maintenance so that plant investment is protected.

Studies to see how these principles operate within the district may require more detailed treatments than are practical parts of the outline in this manual, though the transportation and school plant sections do touch upon items 3 and 4 above. A general approach, however, which may indicate whether or not detailed study would be profitable, may be made by comparing schools within the district--with reference to items 1 and 2 especially. Such comparisons are particularly helpful when consolidation of schools or districts is an issue. The procedure should be:

(1) Collect percapita-student cost data for the different schools to be compared (or for selected sample schools) which may typify those of different size, organization, program, or facilities. Tables 7, 8 and 10 provide patterns which should be particularly useful for the purpose--though it may not be desirable to gather data for a full ten-year period.

(2) Seek explanations for any radical differences in percapita pupil costs and consider whatever adjustments may be feasible, consistent with fair distribution of educational services to students.

Projecting Financial Needs and Resources

In order to carry its responsibilities for planning for the educational program, a school administration must anticipate needs and the resources for meeting them--recognizing, of course, that the best that is available is an "educated estimate" made on the assumption that trends and influences beyond the scope of data available in the school district may, of course, make predictions inaccurate. Accordingly, projections may be made on the basis of data gathered for the tables in this section.

The starting point for projections is enrollment, for purposes here preferable translated into A.D.A. A more refined projection of enrollment than is available through the data in the tables on pages 54-63 of this section is provided through a table in the section on school plants in this manual. It is suggested that, if the school plant section is used in the study, the projections calculated there be compared to those made here (with recognition that enrollment is usually some 13% to 14% above average daily attendance) as a check on calculations.

Simple, rough projections can be made by plotting the figures on graphs and extending lines for future years in accordance with trends indicated in the pattern. Another method is to calculate the average increase or decrease per year and assume that this average will continue for as many years as are chosen to project. For more exactness, however, the values may be substituted in a formula for projection. One of the most commonly used and practical one is for projection on the basis of "least squares."* It is usually advantageous to have a graph pictorializing the data.

We suggest projections in this order:

Needs

(1) Project for a ten-year period the average daily attendance for the district.**

(2) Project for the same period the current expense per pupil in A.D.A. for the district.

(3) Project for the same period the capital outlay and debt service expense per pupil in A.D.A. for the district.

(4) Multiply the projected A.D.A. for the year for which the projection is to be made by the costs per pupil in A.D.A. projected for that year to determine the projected current expense needs and capital outlay debt service needs for that year.

Note: We suggest some common-sense reflections on these projections, considering any unusual events (the moving in and out of a major industry, the building of any new private or parochial schools in the district, local depressions or booms in businesses or industries, and the like) which may have in the past affected the data upon which the projections are based, or which are foreseeable and might affect projections. Adjustments upward or downward in predictions should be made accordingly. It is to be remembered, of course, that general influences, such as price rises and general population movements and growths, are reflected in the past figures and that projections are on the assumption that such general trends will continue. Rising costs (for teachers salaries, materials, equipment, etc.) characteristically raise A.D.A. costs. A projection line based on experience over the last decade, therefore, reflects these price rises and other general trends, so that additions need not be made for them.*** All projections, needless to say, are based on the assumption that trends will continue--an assumption obviously subject to exceptions.

Resources

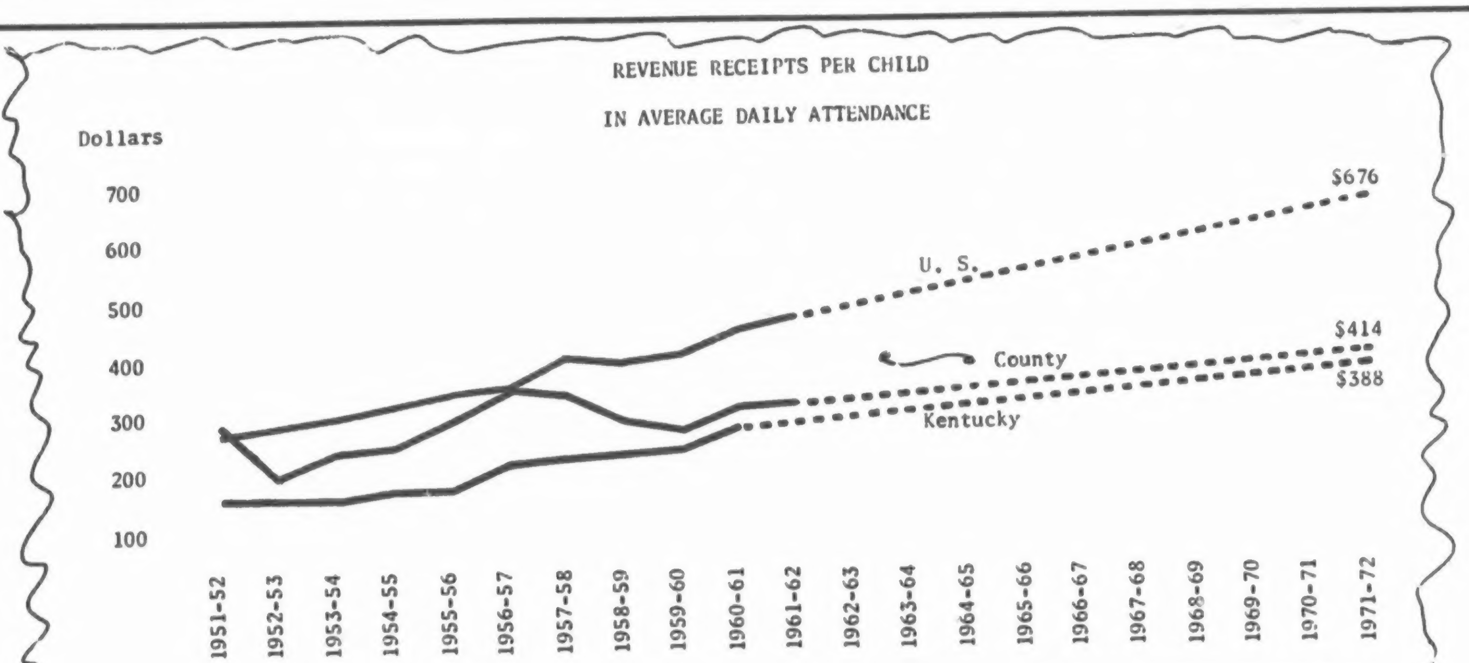
(1) Project the revenue from local sources per pupil in A.D.A.****

(2) Project the revenue from state and federal sources per pupil in A.D.A.

(3) Project the total revenue from all sources per pupil in A.D.A.*****

Using the projections of both needs and resources, comparisons can be made to determine where disparities lie between them and to "determine" what is required to bring them together. Since the school district does not, of course, have any direct control over funds from outside sources, the projection of revenue from local sources provides the basis for decisions regarding whether or not a campaign for a higher tax rate or for raising the assessment ratio may be necessary. The difference between projected needs and resources at any point represents the amount over and above anticipated income which the district needs to raise (assuming that income is not projected to equal or exceed the need).

The tax rate, of course, will have to be adjusted in proportion to the difference. (For instance, if a district's projected income from local sources were $300,000 with a tax rate of $1.50 per $100 of assessed valuation, it would need to raise the rate by 50¢ (to $2.00) in order to raise another $100,000 per year. Of course, if it could persuade the assessor to raise the assessments by one-third, the same increase would be accomplished.)



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* An example of the application of this formula is in the appendix of this manual, p. 76, used in the example to project first-grade enrollments.

** Since the enactment of the Foundation Program law changed many of the pupil accounting methods, it is suggested that figures used in projecting A.D.A. start with the 1956-57 school year.

*** Capital outlay and debt service calculations particularly need to be related to the conditions of school plants in the district. Unless needed buildings have been added gradually, projections are likely to be based on "erratic" data. Also, if plant construction is behind needs, some account should be taken of the fact--and a detailed study, as suggested in the section on school plants in this manual, be made the basis of these projections.

**** If there has been a change in the tax rate during the previous ten-year period for which the data are gathered, the data must be adjusted accordingly.

***** Inevitably these projections will not exactly "jive" with each other, because of small errors sometimes inaccountable. That is, the sum of revenue from local and state-federal sources for any given year will not exactly equal that projected by totals. Some confidence is generated, of course, when these figures are close together.

TABLE 1

Assessment of Property Subject to Local School Taxation in the District for the Last Ten-year Period

School Year	Total Assessed Valuation	A.D.A.	Assessment Per A.D.A.	Assessment Ratio*	Legal Tax Rate	"True" Tax Rate**
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						

* **For** 1960-61, the total assessed value back of each school child in average daily attendance in Kentucky local districts was $7,181. The ratio of assessed to true value of taxable local property was 32.1 percent.

** The "true" tax rate is calculated simply by multiplying the tax rate by the assessment ratio. Thus, a district with an assessment ratio of 30% and a tax rate of $1.50 has a "true tax rate of 45 cents; that is, a tax of 45 cents on each $100 of full value.

What is the total income of the district for the last ten years? What proportions are from local, state-federal and non-revenue sources? What are the trends in amounts and proportions? How do the proportions compare to those for other districts and the state as a whole?

TABLE 2

Total Income of the District for
Last Ten-Year Period

School Year	From State and Federal Source	Percent of Total	From Local Revenues*	Percent of Total	Non-revenue Receipts**	Percent of Total	Total Receipts
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							

---

* This figure was 41.2% for Kentucky as a whole in 1960-61, the range 77.9% to 6.4%.

** Include sales of property, gifts, tuition, fees, and the like. Do not include borrowings. A common error in calculating percent of total income expended in each category comes from counting borrowings as income.

What are the sources of revenue income from state and federal governments?

TABLE 3

Revenue Income of District from State and Federal Sources for Last Ten-Year Period

School Year	State Percapita or Foundation Program Fund	Other State Aid	Special Vocational Training	Other Federal Aid through State	Other Federal Aid	Total from Non-Local Sources
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						
19__-__						

What have been the Foundation obligations of the district since the program became effective in 1956? How much "leeway" money does the district have? What proportion of local income is "leeway"?

TABLE 4

Foundation Obligations of the District Since 1956

	Foundation Obligation	Tax Rate Required to meet Obligation	Difference between Required and Total Tax Rate	Amount of "leeway" Income
1956-7				
1957-8				
1958-9				
1959-60				
1960-1				
1961-2				
1962-3				
1963-4				

What are the sources of local income for the district for the past ten years? What trends appear in them? Are any of them particularly unstable in the amount of revenue they produce year by year? Is the instability (from whiskey, for example) great enough to limit the bonding power of the district?

TABLE 5

Income of District from Local Source
for Last Ten-Year Period

School Year	General Property Tax	Franchise Tax	Whiskey Tax	Bank Shares	Poll Tax	Non-Revenue Receipts*	Total from Local Sources
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							
19__-__							

* These figures will be the same as for the same column in Table 2.

EXPENDITURES

What has been spent for teachers' salaries in the district during the last ten years? What are the salary averages and what is the trend in the salaries?

TABLE 6
Expenditures for Teachers' Salaries and Average Salaries
in Last Ten-Year Period

School Year	Amount for Teachers' Salaries	Number of Teachers	Average Salary per Teacher*	Total for Teachers' Salaries	Average U. S. Teacher Salary	Average Kentucky Teacher Salary
1953-54						
1954-55						
1955-56						
1956-57					4,220**	2,800**
1957-58					4,520	3,125
1958-59					4,775	3,250
1959-60					5,025	3,375
1960-61					5,215	4,069
1961-62					5,527	4,125
1962-63					5,735	4,275

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* This figure for 1960-61 was: For the United States, $5,716; for Kentucky, $5,102--independent districts, $4,817; county districts, $3,862.

** Source: Rankings of the States, 1957-1963. Research Report of National Education Association, 1201 16th St. N. W., Washington 6, D. C.

For what purposes have school funds been spent (in major categories) during the last ten years? How do the proportions spent in various categories compare to those of other districts?

TABLE 7

Current Expense of District by Categories for Last Ten-Year Period

Current Expense

School Year	Instruction		Administration		Plant Operation		Maintenance		Fixed Charges		Other School Services		Total Current Expense	
	Amt.	% of total	Amt.	% of total	Amt.	% of total	Amt.	% of total	Amt.	% of total	Amt.	% of total	Amt.	% of total
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
19 __-__														
Kentucky Averages in percentages for 1960-61*		73.4		3.2		7.1		2.9		2.2		3.1		
National Averages in percentages for these categories**		66.3		4.6		8.7		3.2		6.2		6.8		

* Calculated from Biennial Report of Superintendent of Public Instruction, 1959-61, Frankfort, Kentucky.

** Derived by calculations based on report, p. 50, Digest of Educational Statistics, 1963, U.S. Department of Health, Education, and Welfare, OE-10024-63. Unlisted current expense costs were 1.1%. Current Expense was 80.8% of total expense--Capital Outlay 15.9%; Debt Service (interest), 3.3%, in 1961-62. (See Budget Allocations in appendix.)

Capital Outlay and Debt Service Expenditures of District for Last Ten-Year Period

TABLE 8

School Year	Capital Outlay	Debt Service	Total of Both Capital Outlay and Debt Service *	Total all Expenses	Percent Capital Outlay - Debt Service is of total Expense
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					

---

* This will be totals of Current Expense (preceding Table) plus totals of Capital Outlay and Debt Service. Nationally, as indicated in footnotes to the previous table, Capital Outlay and Debt Service costs represented 19.2% of the school budget in 1960-61.

What is the percapita student income of the district for the last ten years? How do these figures compare to those for other districts, the state, and the nation?

TABLE 9

Percapita Pupil Income for Last Ten-Year Period

School Year	Average Daily Attendance*	Average Daily Membership*	Total Annual Income Receipts**	Total Income per ADA	Total Income per ADM
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					
19__-__					

---

* Either Average Daily Attendance (A.D.A.) or Average Daily Membership (A.D.M.) can be used in the calculations here. For comparisons to state and national averages, the A.D.A. is more useful. Also, in most districts, it is the more stable figure. In planning buildings, however, membership must be considered since every pupil enrolled should have a seat in the classroom. We suggest use of A.D.A. in calculating percapita current expense, and A.D.M. for capital outlay and debt service expense.

** These figures will be the same as for the last column of Table 2.

What are the percapita student costs for the last ten years? How do these figures compare to those for other districts, the state, and the nation?

TABLE 10

Percapita Pupil Current Expense for Last Ten-Year Period

School Year	Total Annual Current Expense*	Total Annual ADA or ADM**	Current Expense per ADM	Capital Outlay & Debt Service Expense	Capital Outlay & Debt Service Per ADA or ADM ***
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					
19 __-__					

---

* This will be the same as the last column of Table 7.

** Current expense per pupil in A.D.A. in Kentucky in 1960-61 was $250; in the nation, $390. N.E.A.'s estimate for 1962-63 was $275 for Kentucky; $432 for the U. S.

*** This will be the same as column 3 of Table 8.

Does the district borrow for other-than-capital-investment purposes--i.e., comparatively short-term loans to meet current obligations, as distinguished from financing new buildings or purchase of bus or "permanent" equipment? If so, review record of these borrowings and their costs:

TABLE 11

Borrowings for Current Obligations of the District for the Last Ten-Year Period

School Year	Amounts Borrowed	Interest for Year on such Borrowings
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		
19 __-__		

Section V—School Plants

The State Department of Education in Kentucky advises districts and enforces regulations regarding such matters as size of site, safety design in building construction, size of classrooms, and space allotments for various facilities, when new school plants are being built. Also, the Department has regulatory powers with respect to issuing bonds for new construction. Actually, once a school plant is built, however, responsibility for its maintenance and proper use fall almost entirely upon the local school administration, though state authorities in health and safety do some inspection and though the Department of Education may "condemn" a plant as unfit for use and, theoretically at least, may deny state funds for its use.

The principles offered here to help in school plant evaluation are meant to provide guide lines for school districts wishing to maintain adequate plants, regardless of minimum levels set by law or State Board of Education regulations. Questions which follow are guides to consideration which should be made in planning new buildings and in appraisal of existing plants. Since choices are usually mean, few set "right" or "wrong" answers ordinarily are available. Each question, however, represents a value to be sought.

Site and Location:

A chain of related issues arise in any attempt to select a site for a school:

Will it be for students close by who will have their own ways of getting to school? If so, it should be in an area where traffic hazards are at a minimum, where there are sidewalks and provisions for control at dangerous crossings; and arrangements for bicycle storage, for instance may be desirable.

Or, will some (or all) students be transported by school buses? If so, the site may desirably be somewhat removed from population centers, where land may be less expensive, traffic routes may be planned, and the school may be isolated from undesirable noise, business establishments, or zoning patterns.

How big the school should be depends of course, on answers to the above two questions--as well as upon present and projected density of pupil population. But which way the population is moving is related to location also. If the area is building up rapidly, a transported population may in a few years be displaced by one of pupils who can get to school by their own means. In general, the "walk in" school will be smaller than the one for which students are transported. Transportation facilities are likely to represent an investment that is expensive unless large numbers of students are served.

In general, a good location is on the edge of developments in a fast-growing community.

How "fast" is "fast?" Since most school plants have a "life" of roughly fifty years, a theoretical rule-of-thumb may be to locate a new plant where population may be expected to be balanced on both sides of it in twenty-five years. Actually, a bird-in-the-hand, conservative logic, it should be closer, rather than farther, from the rim of population growth, though better planning is usually possible when it is farther out. It should be noted that the "rim" of population moves outward more slowly as a city gets larger because its circumference increases with its growth. Since so many other considerations enter into selection of site--and population projections in any case are precarious--these matters, while not minor, are of such uncertain value that there is not point to making exact calculations, though they should be weighed in over-all planning.

Both the State Board of Education and the National Council on Schoolhouse Construction have minimum standards for size of site, the latter recommending:

> For elementary schools, 5 acres plus 1 for each 100 or major fraction thereof enrolled.
>
> For junior high schools, 20 acres plus 1 for each 100 or major fraction enrolled.
>
> For senior high schools, 30 acres plus 1 for each 100 or major fraction enrolled.

These standards should be regarded, however, in light of several variables. Some sites which meet the acreage standards may be of such terrain that little is usable, either too steep, or poorly drained. Areas separated by public highways, for example, may be less desirable than smaller plots in one unit. Furthermore, the pupil transportation system affects use of site. If parking and loading areas require much space, less is left for playground, athletic field, outdoor theater, or reserve for expansion.

Size of site is important. How it is used--and whether or not it is usable--is just **as** important a consideration. Also, of course, drainage, security from flood, availability of utilities and means of sewage disposal are important matters.

> Note: It is worth considering that land, purchased at reasonable prices, historically never depreciates in value and is therefore a sound investment in which the district is unlikely, with good management, to lose. Even if prices drop, the land purchased as a prospective site--though perhaps never used for a school plant--is likely to be worth as much (in terms of purchasing power of dollars) as when it was bought. Buildings depreciate and require maintenance which may "eat up" investments; land ordinarily does not. A board of education may be advised, therefore, to

invest funds as it can to protect the interests of the district by long-range selection and purchase of potentially desirable school sites. The wisdom of such a policy is demonstrated when one observes schools surrounded by heavy traffic and crowded into commercial areas where there is little opportunity to planning for playground space, unloading areas for buses, or parking space for vehicles or bicycles. Schools which a decade or two ago were in open country where there seemed no point to procurement of land to insulate it from such pressures, are now closed in; and parking and playground areas, to say nothing of space for landscaping and aesthetic quality setting, can be acquired now only at considerable expense.

Pupil Dispersal

The State Department of Education requires a scatter map of pupil dispersal before approval of site and plans for any new school construction in Kentucky--but, even if such were not the case, such a map and data on projected enrollments are needed for decisions on whether or not a "walk in" school is practical, or whether some or all of the students should be transported--issues which affect, also, whether more than one school should be built and how much building is needed at all.

Here are suggestions on how a pupil dispersal map may be prepared:

1) The pupil personnel director (and/or others who work with enrollment and pupil transportation problems) may make up a map, using record cards to locate homes of students. Usually, pins or dots may be placed on a map and then compounded--unless the population is small--so that a dot or pin may represent more than one pupil, at least in crowded areas. Especially in small districts, such a method is practical.

2) For large or crowded districts, a practical way is to prepare a "gridded" map of the district, reproduce it in quantity, and ask each pupil to place a clear "X" on the spot where he lives in the district.

If the district is too large for one map to be printed on an ordinary sheet, it may be necessary to section the map and reproduce parts which are large enough to encompass the enrollments of each given school. Usually, a map small enough to be run on a small offset press is still large enough to cover the district. Simple instructions may be printed on the back of the map, with the expectation that teachers will help the lower-grade pupils to follow instructions.

The map should be sectioned by a "grid" (of light lines drawn to form squares) which divides the district into square-mile areas, and a number should be printed in each square to identify it. (The purpose should be to keep both the grid lines and numbers small so that students will ignore them in marking the map.

Once the maps are marked and collected, the marks on each grid square can be tallied and a master map made up, using either numbers or dots (usually with each dot representing several students in an indicated ratio) to interpret the frequencies in each square. Practical adjustment may be necessary where squares are crossed by transportation barriers which necessitate that pupils in the same grid square be transported in different directions.

3) For the districts in which most students are transported, it is sometimes practical to combine suggestions 1 or 2 with an arrangement for having someone ride each school bus and mark the rough location of each student's home as he leaves the bus. (If a transportation survey is being made and bus load-balance and time schedules are under scrutiny, counts can be tallied for each pick-up- and delivery point also, with times indicated.)

Projecting Enrollments

Enrollment projection may be made in terms of average daily attendance (A.D.A.), average daily membership (A.D.M.), or enrollment at any given point. The term preferred depends, obviously, upon the purpose for which it is to be used. (The secton on Finance of this manual, for instance, suggests use of A.D.A. figures for cost projections) Usually, for building purposes, it is desirable to use the term which will best indicate the student capacity requirement of a building. This figure is ordinarily set at 30 pupils per classroom, on the assumption (in Kentucky) that 30 pupils enrolled will generally average 27 pupils in average daily attendance, thus satisfying the requirement for one classroom unit under the Foundation Program. On the assumption that enrollment at opening of school in the fall is a practical index to numbers of classrooms and teachers needed, the suggestion here is that attendance at the end of the first month after school opens in the fall is a preferred form for the data upon which to base projections since it is a more recent figure than any based on the previous year and is also usually the largest figure unless in-migration of students is unusually heavy.

There are various formulae as well as methods of projecting enrollments, some much more refined than the one suggested here, which is based on "straight line" projection of grade-by-grade survival rates accumulated over a period of years. All projections are based on certain assumptions. The procedure offered here is based on these:

1) Recognition should be made of any special circumstances that might affect the projection

Form for Projection and Enrollment on Basis of Grade-by-Grade Survival

Name of School, part of district, or district ______________________________

Basic data:

End of first month enrollment*	Grades											
	1	2	3	4	5	6	7	8	9	10	11	12
1956												
1957												
1958												
1959												
1960												
1961												
1962												
1963												
1964												
Total												
Mean ratio of survival from preceding grade (except grade 1)												

* Be sure all data are for same point in the school year. Also, be sure that figures for each year are adjusted for any "trading" of students between your district and a neighboring district. Furthermore, modifications should be made if data are used before and after any new private or parochial school district, or any change made that would affect proportions of students attending such schools.

such as, completion of a new private or parochial school in the district, contracts with other districts to transfer students, annexations or detachments of part of the district, or movements of industries in or out of the district. Since the Foundation program went into effect in 1956, and since it changed the pattern of pupil accounting, it is suggested that only figures since the 1955-1956 school year be used in the calculations.

2) Projections are reliable somewhat in proportion to the number of the enrollments included, so that projections for the total district are likely to be more reliable than projections for any one school, for any group of students at a given level, or for any one area of the district. Nevertheless, it is often necessary to make projections by schools, levels, or areas, in order to plan locations and sizes of school plants.

3) Projections are more likely to be reliable for short compared to long periods.

4) Projections made on the basis of the suggestions here reflect in composite the trends of in-or-out migration, birth rates, holding power of the schools, etc., so that such trends do not need to be calculated separately.

5) All projections, however, are on an "all-things-being-equal" basis, assuming that trends and the forces which produce them during the period for which data are gathered will continue. This is to say, the projection does not come from any "crystal ball." It represents estimates based on what has happened; it is not clairvoyant prophesy.

Calculating survival ratios. To determine the mean survival rate from grade to grade, divide the total for each grade (except grade 1) by the total for the grade just preceding it; that is, total for grade 2 by total for grade 1, total for grade 3 by total for grade 2, and so on. The projected enrollment for a given grade, then, can be calculated by multiplying the enrollment of the preceding grade in the current year by the survival ratio. For instance, if enrollment this year in grade 1 is 200, and the grade 1-to-grade 2 ratio is 92%, the enrollment projected for grade 2 next year will be 184. Projections for succeeding years, of course, must be based upon progressive projections, the projection for the next year for a given grade being the result of applying the respective ratio to the last projected enrollment of its immediate, preceding grade.

Projecting for grade 1. There are several ways of projecting enrollments for grade 1. Here are some:

1) If there is a steady trend upward or downward, calculate the over-all gain or loss in first-grade enrollments from year to year. If the numbers are about the same each year, take the average of the total of them and assume that figure to represent a reasonable estimate of the increase in numbers to be expected year by year. If there is a trend in the increases or decreases--that is, if the trend is "accelerated" either upward or downward--translate the change into a percentage; this figure becomes the ratio next year's first-grade enrollment may be expected to be of this year's, and so on.

2) A second way requires: Gather data on the births in the school district and pair it with grade-one enrollment of six years later respectively. The total births of the years supplying the total grade-one enrollment (six years later) may then be compared to the total grade-one enrollment, to obtain a "survival" ratio, by the same process used in calculating ratios between grades.

Districts not comprising county units may have difficulty obtaining accurate birth data. Checks must be made to make sure that all birth data have a uniform basis for their reporting. Be sure that births are recorded by residence of parents, not by hospital locations where the births took place.

3) Projection of first-grade enrollment may be made on the basis of the "least square" formula. This formula, though somewhat complicated, has the advantage over (1) above in fitting situations where the trend is not clear, and over (2) in not requiring some data often difficult to obtain. The pattern for such calculation, with a simplified example provided to clarify the method, appears in the appendix of this booklet on page 76.

Projections of enrollments for grade 1, of course, become the basis for projection for grade 2, 2 for 3, and so on, as though the starting point data were real.

Inventory of Plant Facilities

A practical inventory of school plant facilities results in two categories of information related to:

1) A broad view of where the district stands in the general adequacy of its school physical facilities, considering particularly its capital investment obligations to meet depreciation and expansion needs.

2) Detailed problems needing attention, particularly those related to safety and health, or to acute limitations in plants at particular points.

The following outline is suggested for gathering information for both these purposes.

Name of School ____________________

(Note: if the plant has been built in "installments"--that is, different units of it built at different times--evaluate each unit separately, then assemble a composite report of the plant.)

Date of Construction ____________________

Check type of construction:

Number of floors (exclusive of basement):
- ____ 1.
- ____ 2.
- ____ 3.
- ____ 4.

Basement:
- ____ None.
- ____ Full.
- ____ For heating plant only.
- ____ Others: ____________________

Outside walls:
- ____ Brick.
- ____ Block.
- ____ Poured concrete.
- ____ Wood.
- ____ Other: ____________________

Inside walls:
- ____ Masonry (brick or block or poured concrete, sometimes plastered).
- ____ Masonry throughout in exterior and corridor walls, but room partitions wood and plaster or dry-wall.
- ____ All wood and plaster (or dry-wall) interior.
- ____ Other: ____________________

Floors:
- ____ Concrete throughout (with tile or wood overlay).
- ____ Concrete throughout with no overlay.
- ____ Concrete (perhaps with overlay) in corridors, but wood in classrooms.
- ____ Other: ____________________

Ceilings:
- ____ Acoustical tile or sprayed-on acoustical plaster.
  - ____ throughout.
  - ____ in classrooms only.
  - ____ in certain classrooms.
- ____ Concrete (painted usually, or plastered).
- ____ Plaster on wood or web-metal lathe.

____ Plywood.
____ Other:______________________

Roof:

____ Concrete (with tar-paper layers and pea-gravel or other "built-up" finish on some insulation, usually).
____ Steel-joist-supported of fire-resistant material and finish.
____ Wood-joist supported, wood sheeting, usually covered by fire-resistant material and finish.
____ Other: ______________________

Stairways:

____ None (except perhaps to heating plant or storage room).
____ Concrete.
____ Steel.
____ Wood.
____ Other: ______________________

Windows:

____ Aluminum frames.
____ Steel frames.
____ Wood frames.
____ Other:______________________

Heating plant fuel:

____ Coal.
____ Gas.
____ Electricity.
____ Other: ______________________

Heating plant mechanism:

____ Steam boiler.
____ Radiant panels.
____ Hot water.
____ Hot air.
____ Other: ______________________

School buildings generally may be grouped as follows in terms of over-all construction. Considering information collected by use of the above form, check the pattern which applies most nearly to this building (or unit):

_____Type I: Fire resistant construction.

The building is basically of solid masonry and concrete (concrete floors reinforced by steel) throughout. Floor coverings may be of tile or wood, but on concrete base. Ceilings and walls may be plastered, but on brick, block, or concrete. Room partitions are masonry, not wood joisting covered by plaster or plywood. Roof has a concrete base, or is of built-up composition known to be fire resistant and without wood support, and stairs are of concrete or steel. The building is basically of concrete or masonry, with wood only for trim, doors, and window frames (though aluminum or steel frames and steel exit doors are now a consistent part of a fire-resistant design). Generally, this building has lowest maintenance and upkeep costs.

_____Type II: Semi-fire resistant.

Outside walls and, unless the building is small corridor walls also, are of masonry, with interior floors and roof of wood overlaid by various compositions. That is, the school has a generally fire-resistant shell, but the interior is essentially of wood or of wood base. Maintenance is likely to be fairly expensive, the necessity for replacement of floors, stairs, and roof being likely after extended periods of use.

_____Type III: Basically wood construction.

This type usually has plaster walls and ceilings, reminiscent of the one-room school--usually an old building, sometimes "modernized" by addition of asphalt shingles or metal roofing. If properly maintained and heated, these buildings are expensive.

Plant Balance vs. Capacity.

Among the most variable standards are those for determining the pupil capacity of a school building. Most states, including Kentucky, have minimum floor-space-per-student standards for classrooms. For one-room schools, these have some significance. A great deal depends, however, upon whether or not the classroom includes space for storage and toilet facilities. If there are lockers elsewhere, and library, auditorium, gymnasium, laboratory and other spaces, classrooms may properly be smaller than otherwise. Recently the aim in design of school plants is to provide a "balance" of space for various purposes. The investment in a building is meant to provide space for the pupil not only in the classroom but also in the corridor, library, auditorium, gymnasium, cafeteria, wash room, and loading dock if he is to ride a bus. In small schools, the multipurpose room may serve efficiently since only by using the space in a variety of ways can it be kept busy a major part of the day. In larger schools, specialized facilities for auditorium, gymnasium and cafeteria may be just as economical (in terms of percapita student investment) since there are enough students to employ facilities much of the time--and conflicts are unavoidable if facilities are crowded. There is, as yet, no finite research on just what is a "balanced" school plant, though the principle that "balance" is needed is clear. Size of school as well as kind of program certainly affect what space allocations should be.

It should be noted that stairs and corridors usually take about one-fifth of the foundation space, with another one-fourth for walls, accessories, and administrative spaces. It should be noted, too, that plants which may be in "balance" when originally built may become unbalanced if classrooms are added without additional wash-room, library, gymnasium, auditorium or other facilities. Sometimes, also, these "accessory" facilities are made larger than needed at first, so that classrooms may be added later to bring the plant in balance. If increased enrollments are projected, such planning may be wise.

Since the requirements of a plant depend in such great part upon what kind of program the district wishes to provide--whether, for instance, it wishes gymnasium or auditorium space for community as well as school uses--those conducting the evaluation should concern themselves with how well, in terms of physical facilities, the plant serves the kind of program desired; and whether or not equality of opportunity for such a program is provided in all the schools throughout the district.

Unfortunately, it seems impossible to objectify the matter of whether or not a school plant is balanced, so that the evaluation on this point must be a matter of judgment. It is important to consider, however, that in any comparisons among school plants reasonable considerations must be made of the fact that an adequate plant is more than simply classroom spaces.

Calculating Building (or unit) Capacities:

Assuming that some reasonably general concern is given to seeing that schools of the district have balanced distribution of facilities, it is possible to calculate pupil capacities of plants, or divisions of plants, with practical accuracy. The yardstick itself, however, must be arbitrarily selected. There is nothing sacred about the 30:1 pupil-teacher ratio so widely accepted as reasonable--and those preferring a different standard can usually make a good case for their preference. If a district is going in for team teaching, or television instruction, for instance, the ratio may be expected to change. So long as the Foundation Program in Kentucky continues to award classroom units on the basis of twenty-seven pupils in average daily attendance, however, the 30:1 ratio remains a practical one for most districts. The formula suggested here, therefore, is conventional and simple--with some important reservations which must be agreed upon. The reservations are inherent in answers to these questions:

1) Should only "regular" classrooms be counted, or should the special rooms (such as art, music, multipurpose, laboratory, gymnasium, library, etc.) be counted as classroom? What are "special" rooms? If art, journalism, science lecture, music, and language laboratory rooms are "special," how about rooms used regularly for English, mathematics, social studies? Decisions must be made on the distinctions which will be made in the counting. Generally, rooms which do not contain special equipment that will interfer with their general use may be counted as regular. It is wasteful, however, to invest in space for special equipment, then use the space for other purposes or not use it at all.

2) Should rooms be counted in the same way for elementary, junior high, and senior high schools? It must be considered that few schools now provide special rooms for study halls, but that ordinarily high school pupils have at least one period per day for study. Also, Southern Association accreditation standards call for each teacher to have a planning period, preferably with his own classroom free for him to use in setting up materials. This means that, in a six-period school day, on the average one classroom out of six will be without students at any given time. The high schools usually provide more special rooms than do elementary schools, so that an arbitrary distinction, consistently applied, may be expected to allow some margin of space for the high school.

A somewhat justifiable arrangement is to count the "regular" classrooms in each school and assume that, since the high school is likely to have more "special" rooms, the extra margin of space required for the high school program as compared to the elementary will be recognized automatically in the calculation.

The table, page 70, is suggested for use in collecting information to calculate pupil capacities of schools, or of parts of schools--for, if units of a plant are of different quality, it may be important to ascertain the capacities in various categories; i. e., pupil capacity in "adequate," or "acceptable," or "inadequate" facilities. Also, this table brings together general information helpful for judging the "balance" of the plant, for comparing facilities among various plants of the district, and for appraising the adequacy of the plant in terms of the educational program.

Projecting Capital Needs.

A starting point for projecting capital needs for building purposes is, of course, an inventory of what the district has currently. A method of estimating present capacities and shortages (or surpluses) of pupil spaces has already been sketched. To complete the picture, we suggest that an estimate be made of what the community has invested in the plant and equipment, in terms of current prices. This can be done with fair completeness by combining the insurance appraisals made on the buildings of the district. These appraisals are usually made in terms of replacement costs, including furnishings and all parts of plants exclusive of site and underground service lines, sidewalks, etc. The terms of the appraisal should be read carefully to ascertain such points and to determine roughly what proportion of the "true" value of the property the appraisal represents. Usually these appraisals exceed the true value. They are replacement figures and an old building is as expensive to replace as a new one.

These appraisals are of value in the projection of cost needs primarily as they give credence to and provide check-point references for the estimates to be made. For instance, dividing the total figure for the appraisals by the total enrollment provides a rough estimate of prevailing costs per pupil-space. If the figure, considering everything, varies greatly from those suggested here, adjustment should be made accordingly.

School buildings vary in quality of construction as do all kinds of buildings--but probably less than private homes, and more than other public buildings. Despite variations, however, there are some general averages of durability which have a "usable"

Name of school: ______________________________ Grades: ______________________

Number of "regular" classrooms: ____________________ *

Number of "special" additional rooms:

Administrative ________

Agriculture (shop) ________

Auditorium ________

Art ________

Cafeteria ________

Distributive education ________

Health ________

Home economics ________

Industrial arts ________

Language laboratory ________

Library ________

Multipurpose room ________

Music ________

Physical education (gym) ________

Science ________

Storage ________

Teacher's lounge ________

Vocational trades (shop) ________

Washrooms: ________

For boys, how many:
Toilets ______
Urinals ______
Basins ______ ________

For girls, how many:
Toilets ______
Basins ______ ________

For staff: ________

Calculate:

Pupil capacity: Number regular classrooms ______* x 30 = ________

Enrollment in school at end of first month of current year: ________

If there is a surplus of pupil capacity, how much? ________

If there is a shortage of capacity, how much? ________

stability for purposes of projecting probable building needs. That is, the life span of a school building is "regular" enough that its age is some index to the probable usefulness left in it, and its age may be a basis for projecting the need to replace it.

Most school buildings are built on borrowed money or bonds with a maximum loan term of 30 years. Most school buildings in America are retired after about fifty years of service--as a rule-of-thumb. This means that a maximum depreciation estimate is 3 1/3% per year (so that a building would "depreciate out" just as a thirty-year debt on it was amortized). This is the rate bonding companies ordinarily "gamble upon," but it should be noted that they tend to want to be "sure," so that a 2% rate, which would carry the building throughout a fifty-year life span, is more reasonable--though the fact that a site remains after fifty years (and is often worth more now in dollars than the original cost of the entire plant) and that prices today are quite different from those of fifty years ago, all confuse attempts to establish definite figures.

In light of above consideration, however, we present here a formula based on these assumptions:

1) That a school building "depreciates out" at a 2% rate (that is, in about 50 years).

2) That building costs per pupil can be based on allotments of 30 pupils per regular classroom.

3) That building costs today, in rough terms, call for investment of $1, 000 per elementary, $1, 250 per junior high, and $1, 500 per senior high school student to provide site, building, landscaping, and equipment. *

To estimate the capital needs of the district for any given year:

1) Separate building units into groups:
elementary, junior high, senior high (since costs must be estimated separately for each group).

2) Determine how many regular classrooms are in the building units in each group which will be 50 or more years old by the given year selected.

3) Multiply the number of such regular class rooms by 30. The resulting figure represents the number of pupil-spaces which will have been lost by that year through building obsolescence.

4) If present plants are over-crowded, add the number of pupil-spaces the district currently is short. If there is space to spare, subtract the number of spaces.

5) Calculate the number of additional students above current enrollment projected to be enrolled in the given year selected. Add this number. If there is a decrease projected, of course, subtract the decrease.

The result should be the total of the pupil-space units to be needed by the given year in each group to:

1) Replace facilities which will be obsolescent by then.

2) Cover present shortages (or surpluses).

3) Cover anticipated increases or losses in enrollment.

Safety and Health Considerations (details):

As previously indicated, safety and health aspects of a school plant are interrelated. Construction reasonably safe for a one-floor building for example is hazardous if the building has multiple levels. The larger a school, the greater the hazard of step-downs or obstacles in corridors. A one-room wooden school with reasonably maintained out-door toilet facilities and tested water supplied by a hand pump may be satisfactory, whereas the same facilities for six or eight classrooms is likely to become entirely inacceptable. Following are points to check regarding safety and health aspects of school plants.

Lighting:

Is there enough light? (Minimum requirement in Kentucky standards for new plants is 30 foot-candles for ordinary class work; 50 foot-candles for sight-saving classes, drafting, sewing, etc.--with less allowable for auditoriums, gymnasiums, corridors and the like). On dark days, is there enough artificial light available?

Is the light balanced? That is, are there sharp contrasts, glare, too great brightness-differences? Also, is the light distributed somewhat "equally" to all pupils--so that some do not sit in the dark while others are in brightness? (Meters can be used for these measures, but judgments are usually adequate for estimating both amount and balance in lighting, since there are many variables.)

Is the light "under control?" Are there blinds for reducing glare from windows, or for diffusion of light over the classroom? (Needless to say, blinds are useless unless properly used. So are artificial lights. Appraisal can be made only on the basis of facilities available.)

Heating and Ventilation:

Is the heating plant adequate to maintain reasonable temperatures throughout the plant in coldest weather?

Can the heat be balanced among various parts

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* Since costs vary from community to community--to say nothing of variations in quality of construction--these figures may be raised or lowered accordingly. See Building Costs, appendix.

of the plant?

Do some students sit where they are too warm while others are too cold? Do some sit in either hot or cold drafts?

Is ventilation adequate in classrooms? Auditorium? Gymnasium? Locker rooms? Washrooms?

Washrooms and Sanitation:

Is the sewage-disposal system adequate?

Are toilet facilities adequate:*
- In number of toilets, basins and urinal units?
- In quality of floor and wall finish--to resist odors and make for easy cleaning?
- In location of facilities?

Are drinking fountains available on all floors?
(State Board regulation for new buildings requires one fountain for each 75 pupils, with heights adapted to grade levels.)

Safety aspects (miscellaneous):
Is the building in solid condition so that no collapse or wall rupture is likely?

Do exit doors have panic bolts so that they can always be opened from inside?

Is safety-glass used in exit doors?

Do classroom doors swing outward?

Are the corridors clear of:
- Doors extending into them when opened?
- Drinking fountains or other furnishings which are not inset?
- Abrupt steps, not clearly marked and lighted, or without adequate handrails?

Are exits clearly marked?

Are there exits at both ends of buildings or their wings?

If there are multiple floors, are there ground exits for all levels?
(If so, fire-resistant construction is less important. If not, escapes should be provided if the construction is not fire-resistant).

Is the heating plant beneath any part of the building which might contain students?
(Preferably, boilers are located outside the building foundation.) If so, are special precautions taken to insulate it from the rest of the building?

Are any basement rooms used for classes?

Are there any rooms adjoining the heating plant used by students?

Are the stairways of fire resistant materials? If not, are the stairwells enclosed to prevent draft in case of fire?

Is the building so designed that there are few or no vertical draft channels (open stair wells, ventilator shafts, or enclosed courts) which might act as "chimneys" in case of fire?

Is traffic channeled at entrances and exits, and on the school site, so that vision is clear at all crossings and intersections?

Can school buses load, unload, and come and go without having to back up at any time?

Are bus loadings and unloadings arranged so that pupils cross no traffic channels between bus and building?

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* State Department recommendations are for facilities for both sexes to be on all floors, with numbers of water closets, urinals, and lavatories depending upon size of school--i. e., in the elementary school, 6 water closets and 12 urinals for 500 boys enrolled; 14 water closets for 500 girls. Also, heights of units are to vary between elementary and high school. See State Board of Education regulations for minimum standards. Washrooms should contain no wood or other porous materials which may absorb urine or odors.

Section VI—School Transportation

Many of the standards ordinarily applicable to the pupil transportation systems of school districts are applied through the procedures required to qualify the district for all or part of its transportation expense from state funds. There is no point, therefore, to dealing with such standards here. In brief, state laws and regulations set up by the Kentucky State Board of Education call for:

1) The amount of aid from state funds to be adjusted in relation to the density of pupil population, so that amounts alloted per child are lower as the density is increased, and vice versa.
2) The board of education may draw state reimbursement to transport elementary students who live farther than one mile from school, to pick them up and leave them after school not more than one mile from home. (Exceptions on distance requirements are made for handicapped students.) The board may, but is not required to, furnish transportation for high school students--and may get state reimbursement for them if it does so. Also, the board may furnish other transportation services from local school funds, but without reimbursement from the state.
3) Special regulations* for loading and unloading pupils,for safety inspections, maintenance of safety equipment, insurance** and the like are stipulated by law and/or state board of education regulations.

The evaluation plan outlined here is meant to deal with details not covered by law or state board regulations and with the over-all pattern of the transportation system and its general efficiency. That is, state standards are assumed to represent minimums regularly met by districts.

How are the pupil-transportation routes organized and what are possibilities for improvement?***

Any careful study of the routings of buses requires preparation of a map showing all the routes taken, usually with routes drawn in different colors or in different kinds of lines in order to distinguish them from each other. Preferably these routings should be shown with relay centers and with pupils indicated by dots or numbers at pick-up points, so that loadings may be calculated at various points. Trial plottings for different routings may then be drawn on transparent overlays placed over the map and any number of new patterns "tried out," in comparison to the existing pattern. By "trial and error" all chances for improvement of routes can be explored. **** The purposes in re-plotting should be to:

1) Reduce duplication of routings.
2) Balance numbers of students to fit bus capacities--or adjust capacities when new equipment is purchased.
3) Balance lengths of routes.
4) Reduce waiting of students at relay points.
5) Reduce "dead-heading" of buses (while at the same time avoiding the obvious disadvantage to a student of having to board a bus near his school and ride a long circuit before reaching his destination). *****
6) Adjust routings to reduce or avoid hazards of road condition, traffic, and weather.
7) Adjust routings to fit school schedules. ******
8) Adjust routings for convenience of students--to reduce walking distances, or to avoid different loading times for students of the same family going to different schools.

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* Regular speed limit regulations represent "ceiling" speeds for school buses. The board of education may, however, set up lower maximum limits for the district's school buses and require special stops at crossings or make other regulations not in conflict with the state laws. Traffic enforcement agencies, informed of these regulations, may take responsibility for enforcement of the board's regulations upon school buses of the district.

** If the district owns its own transportation system, it may, (but is not required) to carry insurance, but must require any with whom it contracts to transport students to carry stipulated minimum amounts of insurance. The matter of whether or not or how much such insurance should be is one the board may be advised to consider with legal counsel and with the State Department of Education.

*** This kind of study is particularly helpful when a new building is being planned and a preference in location is at issue.

**** A useful tool is a map measuring instrument which can be rolled along the routes on a map to indicate the distance at any point. With it, lengths of trial routes can be easily compared.

***** "Dead-heading" after unloading at the end of the school day may sometimes be avoided by arranging routes to end near the homes of drivers, where buses may be stored over night. The question of security of school property (the bus) must be weighed in determining policy regarding whether or not such arrangements are advisable.

****** Some districts have different schools begin the day at different times to adjust to exigencies of bus routings and reduce waiting time of students who may of necessity be delivered early to their schools.

Obviously, there is no "perfect" pattern for bus routings, since purposes in routing are often in conflict with each other. Sometimes, however, purposes are not inconsistent; that is, duplication can be avoided without overloading, or lengths of routes balanced without making students wait long at relay points, or hazardous points avoided by pick-ups on both sides of them without impairment of service. Evaluation must be, therefore, a weighing of the alternatives among the various patterns that may be conceived.

How is the pupil-transportation system organized for responsible, safe, efficient operation?

Presumably the pupil transportation operation should be administered as an integral part of the school program. That is, it should be a responsibility of the board of education administered exclusively through its authorized agent, the superintendent, who may--and in most instances should--delegate the management of it to a director of pupil transportation, or someone with like designation. Safety records for pupil transportation generally are excellent; however, the fact that pupils' lives are involved places a high premium upon accountability and responsibility in the operation. Economy and efficiency, with consideration of service to the educational program, are obviously also important matters in evaluating the operation. Those doing the evaluation may well ask such questions as these:

1) Is responsibility for pupil transportation centered in any one person who is held accountable and who has a prime responsibility for the operation? Who, for example, is responsible for decisions regarding whether or not buses should operate at times of storm? For recommendations to the board on needs for new equipment? For maintenance of standards of safe conduct by pupils and drivers? For dispatch of help when a bus breaks down en route?
2) Are records maintained so that appraisals may be made in regard to safety, long-range economy, and service?*
3) Is there a system for prompt reporting of accidents or of conditions which are conducive to accidents. Is responsibility for the conduct of students on buses and for discipline in cases of infractions clearly defined and allocated?
4) Does the board of education have clearly stated policies and regulations which define and allocate administrative responsibilities and support those responsible in administering with equity and consistency?
5) Do these policies include definitions of the terms of the service provided to pupils, so that the community understands those terms and can expect a uniform and fair application of them?
6) Are policies and regulations provided so that any use of school vehicles for extracurricular or non-school purposes may be administered fairly and consistently, with full respect for the basic routine of delivering pupils to and from school?
7) Does the district provide services beyond those required or supported by the state; i.e., transporting students for which no claim for state funds may be made? If so, is this service justifiable in terms of costs? Does it make the educational program more effective?
8) Is the transportation service owned by the school district, or is it a matter of contract with a private operator or operators? If it is not owned by the district, have ample measures been taken to assure that principles implied in preceding questions are respected?

How economical is the districts' pupil-transportation system comparatively?

Any evaluation of the efficiency of the pupil-transportation operation should be based upon consideration of how much service it delivers in proportion to costs. A system which restricts its operation to just transporting students to and from school should not be measured, for instance, against a district which provides transportation facilities for field trips, extracurricular activities, and the like, or for students riding less than a mile from school, where traffic and road conditions make walking hazardous. Also, density factors--which are only a rough measure of how many stops are required to get a bus loaded to capacity so that per-pupil-mile costs can be kept low--are imperfectly related to cost differences which grow out of variations in road conditions and traffic. Any comparisons among districts, therefore, should be made in light of a great variety of considerations. Indeed, the most valid measure would appear to be a comparison of costs year by year in the same district, with the same levels of service maintained--with adjustments for rising costs of everything as long as the economy continues to expand! Such comparisons should take into consideration variations resulting from capital outlay for new equipment, which may effect immediate costs but long-range economy, as well as aspects related to maintaining high levels of safety, promptness, and respect for needs of the educational program. A relay of buses which requires a long waiting by students at some point, for example, may reduce costs but be wasteful of student time, and therefore damaging educationally.

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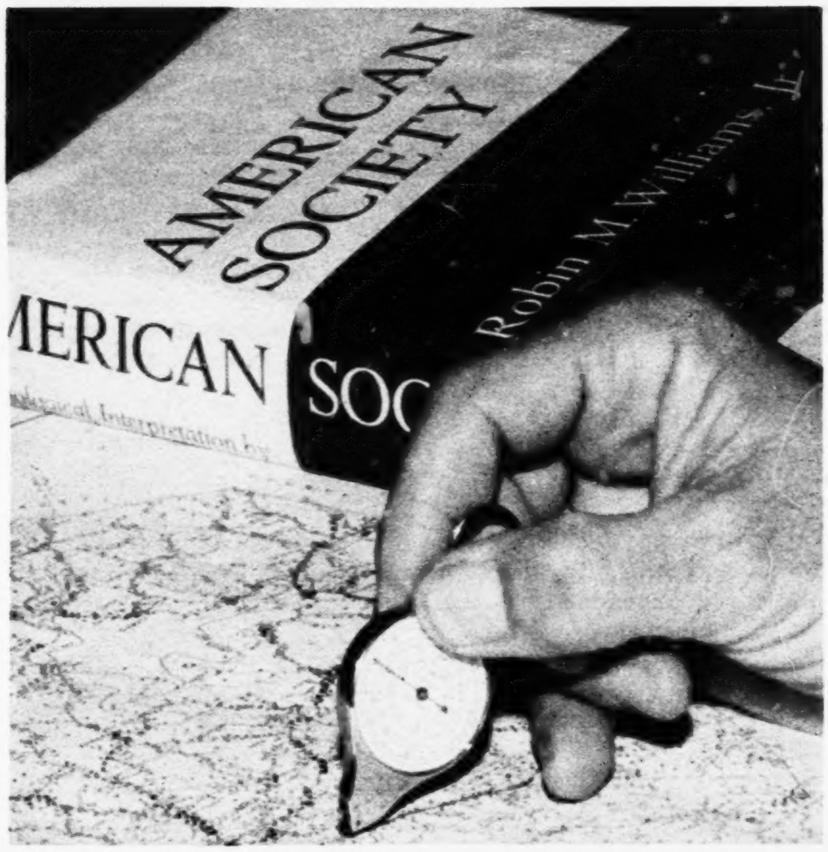
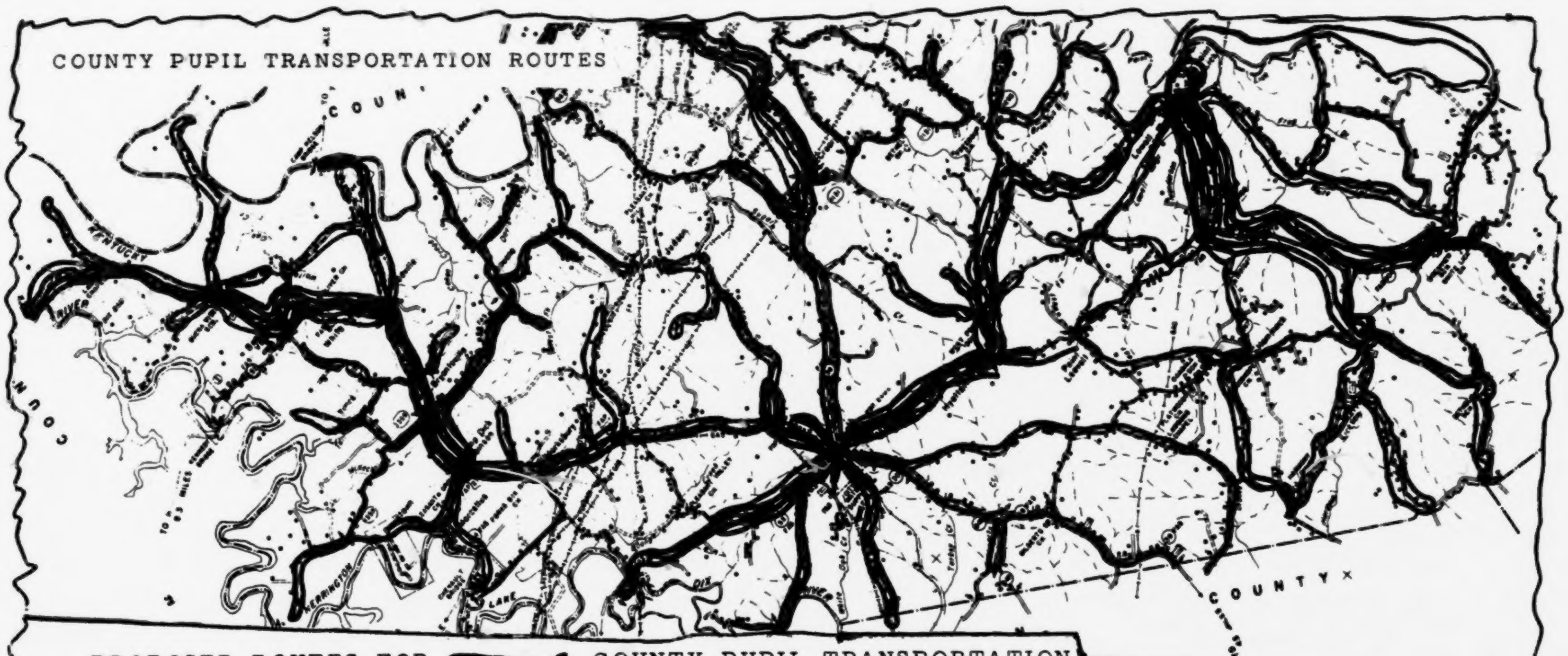
* Districts maintaining a central service center for school buses usually have an advantage in this regard. Records on maintenance make possible stockpiling of most commonly needed repair parts, for emergency use and for systematic and economical maintenance which reduces "emergencies." Particularly, centralized accounting of expenditures provides data which are the basis for developing increasingly efficient operation. The advisability of having centralized service, however, depends largely upon the size of the district.

With full consideration of the variables suggested above, some idea of whether or not the districts' costs fall within a reasonable range may be obtained by considering the following 1959-60 figures for Kentucky and the nation:

	Kentucky	U.S.A.
Number pupils transported during 1959-60	314,385	12,700,999
Cost per transported student	$ 28.04	$ 37.30
Average distance traveled each school day per transported child	.66 mile	.78 mile
Average number school days	169.2	177.6
Cost per bus mile to transport students	$ .2473	$ .2920
Cost per transported pupil mile	$ .0163	$ .0228


AMERICAN SOCIETY
Robin M. Williams, Jr.
AMERICAN SOC


COUNTY PUPIL TRANSPORTATION ROUTES
COUN
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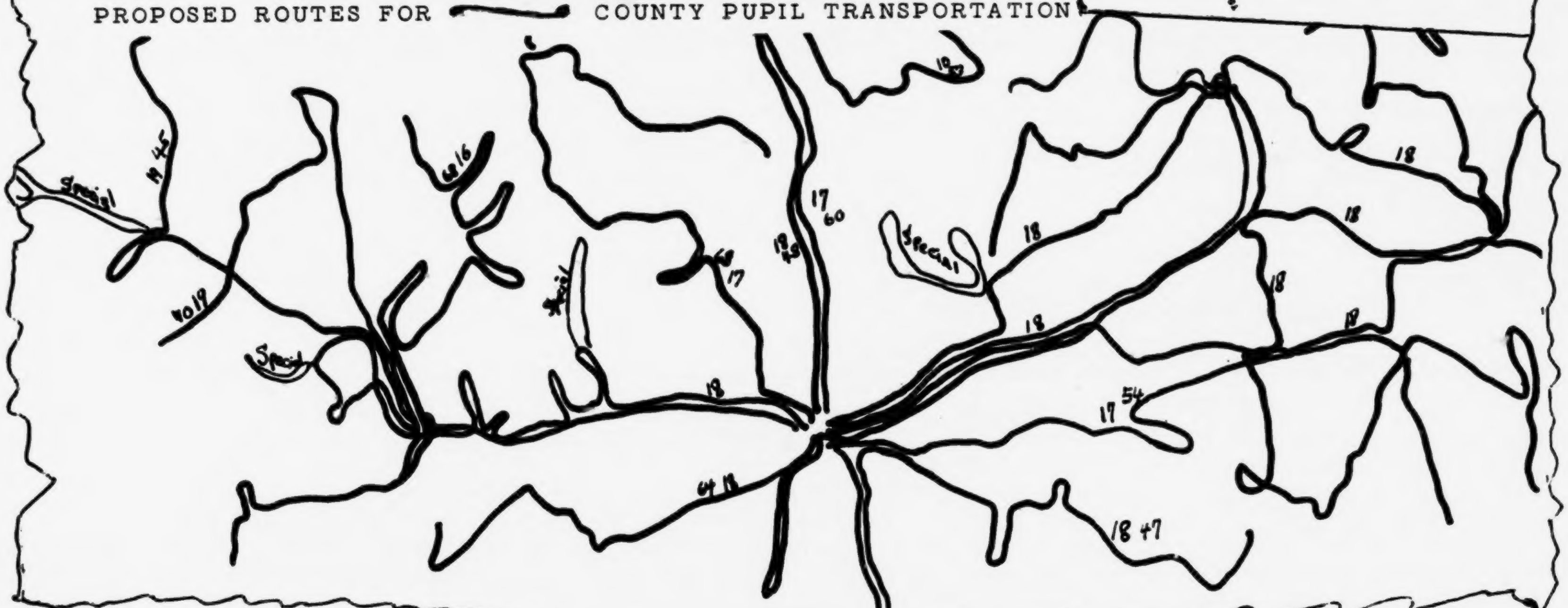
PROPOSED ROUTES FOR COUNTY PUPIL TRANSPORTATION
Special
19 45
40 19
60 16
Special
Special
13
64 18
68 17
17 60
Special
18
18
18
18
19
17 54
18 47
18

Appendix

EXAMPLE OF PROJECTION BY "LEAST SQUARES" FORMULA

Here is an application of the formula for projection to the problem of forecasting grade-one enrollments by the method of "least squares."

Y = number enrolled in first grade for given year.
X = number of year (assuming consecutive years for data), making earliest year 1, next 2, etc.
a = slope

b = intercept

Arrange data in some such pattern as represented by Table A, in which numbers for a sample operation are provided.

To check figures in Table A: $\sum(Y+X)^2$ (last column) should equal $\sum Y^2$ (col. 4) + $\sum X^2$ (col. 5) + $2(\sum XY)$ (Col. 6)* Thus: 13,855 = 10,350 + 285 + 2(1,610).

Solve for b:

$$b = \frac{\sum XY - \frac{(\sum X)(\sum Y)}{n}}{\sum X^2 - \frac{(\sum X)^2}{n}}$$

Substituting figures from the Table A example: (N, of course, equals 9 since the data are for nine years.)

$$b = \frac{1{,}610 - \frac{(45)\ (270)}{9}}{285 - \frac{(45)^2}{9}} = \frac{1{,}610 - 1{,}350}{285 - \frac{2025}{9}} = \frac{260}{56}$$

$$= 4.6429$$

Then, solve for a, substituting 4.6429 for b in the equation:

$$a = \frac{\sum Y}{n} - \frac{b \sum X}{n}$$

Substituting figures from the above data:

$$a = \frac{270}{9} - \frac{4.6429\ (45)}{9} = 30 - 23.2145 = 6.7855$$

Then solve for Y (the projected enrollment) for any given year. In the example provided in Table A, we may use 1965 (10th yr.), since it is the next year anticipated.

$Y = a + bX$
$Y = 6.7855 + 4.6429\ (10) = 53.2145$**

Recall that 80 was subtracted from Y to simplify figures in working the formula. Accordingly, add 80 to 53.2145 and round off the figures thus: 133. This means that the projected first-grade enrollment for 1965 would be 133 students. (Note that each successive year increases the projection by the value of b (in this case, 4.6429), so that for 1966 it would be 138 (with figures rounded); for 1967, 143; and so on.

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* Algebra students will recall this as one of the "factoring" formulae: $(a + b)^2 = a^2 + b^2 + 2ab$.

** A check may be made easily by balancing the calculated values of Y against the actual ones in the data: The differences above and below should balance each other; or, put another way, the sum of the actual figures should equal the sum of the calculated figures. For instance, in the example provided in Table A: The sum of the estimates for 1956 through 1964=990.000; the sum of actual enrollments, for the same period, 990.

TABLE A

Year of data	No. first Graders*** Y	Year X	Y^2	X^2	XY	Y + X	$(Y + X)^2$
1956	20	1	400	1	20	21	441
1957	0	2	0	4	0	2	4
1958	10	3	100	9	30	13	169
1959	50	4	2,500	16	200	54	2,916
1960	30	5	900	25	150	35	1,225
1961	40	6	1,600	36	240	46	2,116
1962	35	7	1,225	49	245	42	1,764
1963	40	8	1,600	64	320	48	2,304
1964	45	9	2,025	81	405	54	2,916
Total ($\sum$)	270	45	10,350	285	1,610	315	13,855

*** To make the arithmetic easier, you may arbitrarily subtract some convenient number from the actual enrollments, adding it to get the actual projected enrollment when Y has been calculated. In this example, for instance, 80 has been arbitrarily subtracted from the values given Y here. Calculation for the true value of Y is not complete until the amount originally subtracted (80 in this case) is added.

PREVAILING PRACTICES

There is nothing sacred about a prevailing practice. Any number of things once conventional are now scorned, some even regarded as outright wrongs!

But, what others do represents at least a possibility. "If others can, so can we," seems a reasonable assumption. Accordingly, norms are useful in any attempt to appraise educational effort.

Listed here are some of the common norms of school operation, alphabetized by subject.

Budget Allocations (see pp. 59,60)

U. S. and Kentucky spent of their total school budgets:

	U. S. in 1961-62	Kentucky in 1960-61
Administration	3.7%	2.5%
Instruction	53.6%	57.6%
Plant operation	7.0%	5.6%
Plant maintenance	2.6%	2.3%
Fixed charges	6.2%	1.8%
Miscellaneous	7.7%	8.8%
Capital Outlay and Debt Service	19.2%	21.3%

Note that these are percentages of total budget, not of current expense budget. (Figures on page 59 are for current expense budget only.)

(Sources: Digest of Educational Statistics, 1963. U. S. Department of H.E.W., Office of Education, Washington, D. C. Biennial Report of Superintendent of Public Instruction, 1961, Department of Education, Frankfort, Ky.

Building Costs (see p. 71)

A cost study of 72 U. S. schools built 1956 through 1958 showed a gross per-square-foot cost of approximately $16. The mean among medians for five areas of the U. S. was 32 square feet per pupil for classroom space and 96 square feet per pupil over all (including corridors, washrooms, heating plant, etc.). The average per-pupil cost, therefore, was more than $1,500.

(Source: The Cost of a Schoolhouse, 1960. Educational Facilities Laboratories, Inc., 477 Madison Ave., New York 22.)

Figures from the Kentucky Department of Education for six Kentucky high schools approved for construction in 1962-1963 totaled $6,864,817, for a 4,170-pupil capacity, so that the cost per pupil would be $1,646.

Capital Outlay and Debt Service (see Budget Allocations)

Cost per Pupil (see pp. 61-62)

U. S. average per-pupil A.D.A. current expense in 1962-63 was estimated for the U. S. at $432; for Kentucky, $275, Kentucky ranking 46th among the states.

(Source: Rankings of the States, 1963. N.E.A., 1201 16th St. N. W., Washington 6, D. C.)

College Enrollments (pp. 19, 21)

In 1961, 36.8% of Kentucky high school graduates went on to college the following fall. For the U. S., the figure was 52.8%.

(Sources: Graduates Kentucky High Schools, 1960. Bulletin XXIX, No. 5, May 1961, published by Department of Education, Frankfort, Ky. School Drop-Outs, N.E.A. Research Division, 1201 16th St. N.W., Washington 6, D. C.

Current Expense per Pupil (see Cost per Pupil)

Dropouts (see Holding Power)

Failures (see Promotions and Retentions)

High School Graduates (see Holding Power)

Holding Power (pp. 16, 17)

Kentucky high school graduates of 1946 numbered 22.3% of their antecedent 5th grade group of 1938-39. By 1960-61, this percentage had risen to 44.9%; that is, 44.9% of the Kentucky 5th graders in 1953-54 (by numbers) graduated "on schedule" in 1960-61--an approximate doubling of holding power in 15 years.

Nationally, comparable figures in 1946 were 41.9%; in 1960, 60.4%--an approximate 50% increase in 15 years.

In 1961, the entire Kentucky high school graduating group was 61.7% of the Kentucky eighth-grade group of 1957-58 from which it came.

(Sources: Holding Power and Graduates Kentucky High Schools, 1956-61. Vol. XXX, No. 3, March 1962. Department of Education, Frankfort, Ky. Where Does Your Community Stand? 1963. Bureau of School Service, University of Kentucky, Lexington, Ky.

Income-Educational Expenditure Ratio

Kentucky spends an above-average proportion of personal income for education compared to the rest of the nation: In 1961, U. S. per-person income was $2,263; per-person expense for schools, $53.54. In Kentucky, income was $1,625, with $49.16 spent for schools. Percentagewise: 2.3% for U. S.; for Kentucky, 3.03%.

(Source: Rankings of the States, op. cit.)

Library Expenditure (p. 31)

Average library expenditures per Kentucky high school pupil were, in 1962-63, $1.70 for county districts; $2.02 for independent--an average of $1.80 for the state.

The average per elementary pupil was: For counties, $1.30; for independent districts, $1.37--$1.32 for the state.

The state average for grades 1-12 was $1.50.

(Sources: Kentucky High Schools, 1962-63 and Kentucky Elementary Schools, 1962-63. Bulletins XXXI, No. 5 and 6, May and June, 1963, published by Department of Education, Frankfort, Ky.

Promotion-Retention (p. 12)

Mean failure (retention) rates for grades 1-12 in Kentucky in 1960-61 ranged from 14.8% held back in 1st grade to 2.4% retained in 12th for the state as a whole--with an over-all average of 6.9% for all grades. (Note: the term retention as used here should not be confused with the term when used: "retained in school.")

(Source: Biennial Report of Superintendent of Public Instruction, 1961. Department of Education, Frankfort, Ky.)

Pupil-Teacher Ratio (p. 33)

N.E.A.'s Ranking of the States, 1963, (op.cit.) reported Kentucky as having in 1961 an over-all pupil-teacher ratio of 1:26.3; the nation as a whole, 1:25.6.

School Day (p. 22)

Since the legal school day in Kentucky is 6 hours minimum for instruction, 6 hours is the median-length school day.

A 1958-59 study by the American Association of School Administrators (Educational Research Service Circular, No. 7, 1960. N.E.A., 1201 16th St. N.W., Washington 6, D. C.) reports that median school days in urban centers range from 6 hours, 17 minutes for first graders in large centers to 7 hours 6 minutes in small ones (2,500 to 4,999 population). Small centers tended to have longer days as did higher grade levels.

School Term (p. 22)

The U. S. average school year for 1959-60 was 178.0; for Kentucky, 169.22, placing Kentucky the lowest in the nation. Since 1960, however, the school term in Kentucky has been lengthened so that for 1962-63 the mean of instructional days was 176.3.

(Sources: Digest of Educational Statistics, 1963. op. cit. Principals' annual reports to superintendents and to Superintendent of Public Instruction, Frankfort, Ky.

Staff Ratio

In 1959-60, there were 16.6 teachers for each principal or supervisor in U.S. schools, 44.5 teachers for each other member of instructional staff, and 12.1 teachers for each non-teaching staff member. There were 24.6 pupils for each school staff member.

For Kentucky some comparable figures were: 19.56 teachers per principal or supervisor; 14.3 teachers per non-teaching staff member.

(Sources: Financing the Public Schools, 1960-1970. N.E.A., 1201 16th St. N. W., Washington 6, D. C. Biennial Report of Superintendent of Public Instruction, op. cit.)

Teacher Preparation (p. 32)

In 1961-62, 71.4% of elementary and 97% of high school teachers of Kentucky held the bachelor's degree; the respective figures for the nation, 92.6 and 95.7.

(Source: Where Does Your Community Stand? 1963, op. cit.

Teacher-Pupil Ratio (see Pupil-Teacher Ratio)

Teacher Salaries (pp. 34, 49, 58)

For 1961-62 Kentucky classroom teachers' salaries averaged $4,125; U. S., $5,527. The trend seems upward: U. S. salaries of instructional staff rose 4.9% from 1960-61 to 1961-62; Kentucky's, for the same year, 1.2%.

It should be noted that instructional staff salaries (which include those for supervisors, librarians, etc.) are slightly higher than teacher salaries in average.

(Source: Rankings of the States, 1962, op. cit.

Teacher: Sex Ratio (p. 32)

About 1 in 7 (14.1%)of U. S. elementary teachers in 1959-60 was a man; in high schools, over half (52.7%) were men.

(Source: Digest of Educational Statistics, 1963, op. cit.

Teacher Turnover (p. 32)

About 17.0% of U. S. public school teachers left their positions (transferring to other teaching jobs or leaving the profession) from fall 1957 to fall 1958.

(Source: Teacher Turnover in the Public Schools, 1957-58. U. S. Department of H. E. W., Office of Education, Washington, D. C.

Teacher's Work Week (p. 33)

In 1961, U. S. teachers devoted 47 hours per week to duties connected with their work (including preparation, paper-grading, parent contact, etc.). Elementary teachers worked a bit longer: 48½ hours; high school, only 45 hours, 54 minutes. Also, elementary teachers' class time was longer: 29.5 hours per week compared to 23.6 for high school.

(Source: N.E.A. Research Bulletin, Vol. 40, No. 3, Oct. 1962. N.E.A., 1201 16th St. N. W., Washington 6, D. C.

Transportation (pp. 74, 75)

During 1959-60, Kentucky buses transported 314,385 pupils at average costs per mile of $0.2473; per pupil mile, $0.0163; per pupil transported, $28.04. The same figures for the U. S. were: 12,700,989 pupils at $0.2920 per mile; $0.0228 per pupil mile; $37.30 per pupil transported.

During 1961-62 in Kentucky 148 pupils were injured in school bus transportation--124 of these minor, 24 serious, 3 fatal.

(Sources: Statistics of State School Systems, 1959-60; Digest of Educational Statistics, Dec. 1962; and Statistics on Pupil Transportation, 1960-61. U. S. Department of H. E. W., Office of Education, Washington, D. C.

Interview in office of Division of Public School Transportation, Department of Education, Frankfort, Ky.)

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